AN EXPLORATORY STUDY OF IDENTITY CONCEPTUALIZATION AND DEVELOPMENT IN A SAMPLE OF GENDER NONCONFORMING BIOLOGICAL FEMALES

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ABSTRACT

This study examines the naming, expression, and development of transgender and gender nonconforming (TGNC) identities in a sample of self-identifying gender nonconforming biological females. The current investigation aims to validate and extend the current theoretical and developmental models pertaining to TGNC and sexual minority groups.

A person's gender is a central feature that may limit one's access to adult roles (Erikson, 1959/1980), Moreover, early identity research suggests that the major task of adolescence is the establishment of an independent identity (Erikson, 1968). Transgender adolescents must integrate both biological sex and gender identification into a cohesive sense of self. Much of the current literature examining individuals with gender nonconforming identities, focuses on discrimination, limited access to health care, major health challenges, conflicting surgical outcomes, and mental health concerns (Devor, 2004; Lev, 2004; Zucker & Bradley, 1995). Scant literature focuses on the developmental processes or the structure and properties of gender nonconforming identities in non-clinical populations (Gagne, Tewksbury & McGaughey, 1997; Mason-Schrock, 1996).

There are several limitations inherent in the current body of extant literature on gender nonconforming and transgender (TGNC) identities. First, the range of gender and sexual identities and their meanings in gender nonconforming samples are constantly changing. Consequently, current research samples may under represent the full-spectrum of transgender identities and over represent clinically severe populations. Second, there is little cross-sectional and no longitudinal data on the developmental trajectories of gender nonconforming identities. Yet, several models posit the developmental sequencing of this identity formation process. Third, the

empirical research on gender nonconformity has focused on biological males in childhood. There is a dearth of empirical research on gender nonconforming biological females.

In order to explore the meanings, expressions, and development of gender and sexual identities in TGNC biological females, 170 self-identified TGNC biological females were surveyed using both forced choice and open-ended questions. Using a differential developmental trajectories framework and based on the transgender model of gender identity conceptualization, it is hypothesized that multiple identity labels are used to organize gender and sexual identities. Moreover, several novel gender and erotic identities will emerge from the data. Lastly, gender identity and sexual orientation identity are likely correlated, but gender identity and partner preference will emerge as independent constructs.

Several significant findings emerged from the data demonstrating both within and between group differences. The data validate the differential developmental trajectories model and extended its application to gender identities in TGNC groups. Data also validate the transgender model for gender identity conceptualization, and expand our understanding of the interaction of gender and sexual identities.

BIOGRAPHICAL SKETCH

Tamara Pardo was born October 26, 1980 in Miami, Florida. After graduating from Miami Beach Sr. High School, Tamara obtained a bachelor's degree with honors in psychology and a certificate in human development at Duke University in Durham, NC. While at Duke, Tamara collaborated in research with Dr. Francis Keefe in the Pain Research Center, and with Drs. Linda K. George, and Dr. Timothy Strauman in the Department of Psychology. Tamara's undergraduate thesis investigated the dynamics of closeness in sibling relationships.

Following graduation, Tamara served a two-year academic appointment as an Associate in Psychiatry at Harvard Medical School in Cambridge, MA and was the Research Coordinator for the Bipolar Disorder Research Program under the supervision of Dr. S. Nassir Ghaemi at the Cambridge Health Alliance.

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For my Papa Joe.

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TABLE OF CONTENTS

BIOGRAPHICAL SKETCH iii

DEDICATION iv

ACKNOWLEDGMENTS v

LIST OF FIGURES viii

LIST OF TABLES ix

INTRODUCTION 1

LITERATURE REVIEW 5

Sex and Gender: Concepts Defined 5

Gender Identity Developmental Theories 7

Gender as an Identity 15

Gender Nonconforming Identity Models 23

Applied Research with Gender Nonconforming Communities 30

Limitations of Current Identity Models 32

RESEARCH QUESTIONS AND ANTICIPATED FINDINGS 34

METHOD 36

Participants 36

Procedures 38

Measures 39

Coding into Gender Identity Groups 41

Statistical Analysis 45

RESULTS 46

Part I. Gender 46

Part II. Sexuality 57

Part III. Developmental Milestones 59

DISCUSSION 72

Summary of Findings 72

Gender 74

Sexuality 75

Developmental Milestones 75

Limitations and Directions for Future Research 76

CONCLUSION 80

APPENDICES 82

Appendix A – Flyer 82

Appendix B – Consent Form 83

Appendix C - Survey 86

Appendix D – Coding Schedule 97

REFERENCES 102

LIST OF FIGURES

Figure 1. Forced choice identity labels among female/woman group respondents

Figure 2. Forced choice identity labels among gender fluid group respondents

Figure 3. Forced choice identity labels among gender transitional group respondents

Figure 4. Forced choice identity labels among male/man group respondents

Figure 5. Mean age coding of developmental sexual milestones by gender identity group

Figure 6. Proportion of respondents by time and gender identity group wishing to have been born a boy

Figure 7. Proportion of respondents by time and gender identity group passing as the other sex

Figure 8. Proportion of respondents by time and gender identity group feeling a need for surgery/hormones to be themselves

LIST OF TABLES

Table 1. Sample demographics

Table 2. Coding domains for self-report qualitative data

Table 3. Classification scheme for forced-choice identity labels

Table 4. Domain criteria across the four thematic gender identity groups

Table 5. Proportions of forced choice identity term response rate by gender identity group

Table 6. Proportions of the sample self-reported sexual identity orientation labels

Table 7. Proportions of sample respondents' self reported partner preferences

Table 8. Age range codings used for survival analyses

Table 9. Discrete survival analysis and mean age range of gender developmental milestones across gender identity group

Table 10. Discrete survival analysis and mean age range for sexual identity developmental milestones across gender identity group

INTRODUCTION

A person's gender is a central feature that may limit one's access to adult roles (Erikson, 1959/1980). Moreover, early identity research suggests that the major task of adolescence is the establishment of an independent identity (Erikson, 1968). Transgender adolescents must developmentally integrate both biological sex and gender identification into a cohesive sense of self. As early as 1987, the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) committee recognized a lack of identity as a risk factor for poor mental health outcomes (American Psychiatric Association, 1987 as cited in Poston, 1990). Despite evidence of gender nonconforming individuals existing over time and across cultures (Savin-Williams & Cohen, 1996), the past century has seen an increase in the medicalization and marginalization of gender nonconforming persons. For example, much of the current literature on gender variance, particularly surrounding transgender identified and transsexual individuals, focuses on discrimination, limited access to health care, major health challenges, conflicting surgical outcomes, and mental health concerns (Devor, 2004; Lev, 2004; Zucker & Bradley, 1995). Scant literature focuses on the resilient developmental processes or the structure and properties of gender nonconforming identities in non-clinical populations (Gagne, Tewksbury & McGaughey, 1997; Mason-Schrock, 1996). Moreover, since 1980 "Gender Identity Disorder" (GID) has remained in the DSM (American Psychiatric Association, 2000). Developmentalists should not ignore the need for exploring resiliency in gender nonconforming adolescents.

An ongoing complication in researching outcomes in gender nonconforming youth is an increased use of diverse identity labels to describe themselves in terms of gender and sexuality (Bilodeau, 2005). As previously noted with lesbian, gay and

bisexual (LGB) samples (Savin-Williams, 2005), such diversification may vastly skew current research findings and render the data unrepresentative or ungeneralizable to same-sex attracted and transgender populations.

There are several limitations inherent in the current body of extant literature on gender nonconforming and transgender identities. First, the poor developmental outcomes observed in clinical outcome studies and clinical needs assessments among transgender-identified persons (Fitzpatrick, Euton, Jones, & Schmidt, 2005) may be based on unrepresentative samples of the transgender population. For example, current research samples may underrepresent the full spectrum of transgender identities and overrepresent clinically severe populations. That is, despite being recognized as umbrella terms, “transgender” and “transsexual” recruitment postings may exclude a host of trans-inclusive identifiers such as “genderqueer” or “tranny boi (also tranny boy)” or even “butch.” Moreover, clinical convenience sampling may overrepresent clinically severe populations, thus inflating negative outcomes.

Second, Denny (2004) and Seil (2004) noted that the past two decades has demonstrated a rapid increase in medical “gate keeping” of sex reassignment surgeries and the distribution of hormone treatment for people who have complete cross-gender identifications and heterosexual sexual orientations. Lev (2004) suggested that such gate keeping may not be providing trans populations with the internal protections for sex-reassignment procedures they were designed to uphold, but may instead be contributing to an increasing rate of poor developmental outcomes. Current research demonstrates that not all gender nonconforming individuals request *complete* sex-reassignment, but may benefit from selective surgical procedures such as only a mastectomy or hysterectomy, only hormone treatment, or simply a *social* modification of gender on personal documents and legal standing (Bilodeau, 2005; Lev, 2004; Meyer, Bockting, Cohen-Kettenis, Coleman, DiCeglie, Devor et al., 2001).

Third, there is a gap in the empirical literature that investigates the normative, cognitive, and affective developmental trajectories of gender variant individuals. There is also little empirical literature investigating the predictors of resiliency in gender nonconforming communities. Outside of the medical model, there is no longitudinal data on the developmental pathways of gender nonconforming identity formation.

Fourth, the existing empirical research on gender nonconformity has focused on gender atypical boys in childhood (American Psychiatric Association, 2000; Menvielle & Tuerk, 2002; Zucker, 2005; Zucker & Bradley, 1995). Thus, there is a dearth of empirical research on normative or resilient developmental outcomes particularly among gender nonconforming natal females (Zucker, 2005).

The purpose of the current investigation is two-fold. First, this study aims to address the current gaps in the medical, psychological, and sociological literatures regarding gender nonconforming identities. More specifically, this study explores the nonconforming identity labels currently used and their meanings and expressions. Second, this study explores the developmental trajectories of gender nonconforming identities to extend Devor's (2004) identity developmental model proposed for transsexuals. Using the differential developmental trajectories framework posited by Savin-Williams (2005), this study explores identity constructions and developmental milestones in a gender nonconforming sample of natal females.

Several research questions drive this study.

- What constitutes the structure and properties of gender nonconforming identities among gender nonconforming natal females?
- How do contemporary gender nonconforming natal females discuss their identities in ways that differ from the available medical and empirical literatures?

- What is the developmental trajectory for constructing gender nonconforming identities?
- How do these developmental trajectories differ between persons/groups?

First, relevant terminology is reviewed. Second, gender identity developmental models are reviewed and evaluated for their application to persons with gender nonconforming identities. Third, relevant models of sexual minority identity development are reviewed as they pertain to models of transsexual and transgender identity development. Fourth, various trans models and current applied research are reviewed to identify the gaps that motivated the current investigation.

LITERATURE REVIEW

This literature review discusses the theoretical frameworks and developmental processes of identity, with an emphasis on transgender and gender nonconforming (trans) identity conceptualization and development. First, relevant terms are defined and the developmental theories for gender identity are reviewed. Second, given the dearth of theoretical and empirical literature pertaining to trans identities, general identity theory is briefly reviewed, and models of sexual identity development are explored and comparatively evaluated for their application to trans persons. For each model, empirical support and limitations are reviewed. Third, extant theoretical and developmental models of transsexual and transgender identities are reviewed and their limitations are discussed.

Sex and Gender: Concepts Defined

Academe is challenged by the interchangeable use of the terms *sex* and *gender* (Hines, 2004; Schaefer & Wheeler 1995). The two terms are, however, semantically divergent. *Sex* (as a noun) is most often used to describe one's demographic categorization as either male or female (Deaux, 1993; Ruble, Martin, & Berenbaum, 2007). This demographic variable has been measured biologically via sex chromosomes (Hines, 2004) or physically by the appearance of genitals (Preves, 2000). *Gender* refers to the trait characteristics and behaviors culturally associated with one's sex (Hines, 2004); it also refers to a person's judgments and inferences about sex including stereotypes, roles, presentation, and expressions of masculinity and femininity (Deaux, 1993; Ruble et al., 2007). *Gender identity*, is a person's sense of self as a boy or a girl. As such, it carries an expected set of role behaviors, attitudes, dress style, and appearance. Although there is no explicit assumption that gender

identity must remain sex-congruent, researchers often interchange sex and gender, defining gender identity as one's sense of maleness or femaleness (Money & Erhardt, 1972; Zucker & Bradley, 1995).

Researchers investigating trans identities recognize that the conflation of sex with gender may have an impact on data interpretation (Hines, 2004; Schaefer & Wheeler 1995). For example, how do persons with trans identities develop a conceptualization of a unique gendered identity? Do trans communities draw a distinction between sex and gender? In every human culture, distinguishing male from female serves as a basic organizing principle (Allport, 1955). A defining characteristic differentiating the discourses of gender identity development pertains to the conceptualization of gender as either a dichotomous or a multidimentional construct. Bem (1989) suggested that boys and girls learn very early about appropriate and binaried sex-differentiated self-concepts and culturally acceptable gendered personality attributes. Cognitive-developmental (Kohlberg, 1966) and social-learning theories (Mischel, 1973) of gender and medical literature (Money & Erhardt, 1972, Zucker 2005) assume that masculinity and femininity are polar opposites. Likewise, these groups differentiate male and female as the only two sex categories (Fausto-Sterling, 2000), and the medical community relies on these strict delineations of sex and gender to summarize the process of pursuing sex reassignment surgeries (Meyer et al, 2001).

In contrast, recent empirical research regarding youth and adolescents suggest that masculinity and femininity are not binary constructs, but instead represent two parallel continuums for discussing gender and sex roles (Doorn, Poortinga, & Verschoor, 1994). The conflation of sex and gender may appear innocuous among people who identify as *cisgender* (i.e., sex-gender congruent) (Serano, 2007). Some people with intersex conditions voice strong objections to the rigid and dualistic

conceptualizations of sex, arguing for greater inclusion of biological and birth appearance variations (such as Kleinfelter's syndrome (XXY), Turner's syndrome (XO), androgen insensitivity syndrome (AIS). For example, some XX infants prenatally exposed to high androgen levels are born demonstrating varying degrees of masculinized genitalia including fused and/or scrotalized labia and enlarged clitorises that appear to be small penises, similar to infants with congenital adrenal hyperplasia (Berenbaum & Bailey, 2003; Fausto-Sterling, 2000). As an alternative to the binary sex model, Fausto-Sterling (2000) juxtaposed the gender conceptualizations of transsexuals and persons with transgender identities in a discussion criticizing the dualistic model of sex and gender and positing that there should in fact be five sexes with a range of gender roles, presentations, and identities. Thus, both intersex and trans persons challenge the aforementioned rigid and binary notions of sex and gender in favor of a more pluralistic spectrum.

Gender Identity Developmental Theories

Developmental research on gender identity typically focuses on the age and the processes by which children develop understanding in three major domains: categorical sex differences (Ruble et al, 2007), self-awareness and constancy of biological sex (Kohlberg, 1966), and sex-gender congruent role behaviors (Bem, 1983). The first of these domains is concerned with answering the question, *what are the average sex differences in behavior*? The second asks, *when do children formally recognize their categorical sex and understand its permanency?* The third asks, *how do masculinity and femininity differ within the sexes?* Examining categorical sex differences involves exploring between group differences; in other words, why do males typically engage in rough and tumble play whereas females typically like skipping or jumping rope? Examining gender role behaviors, however, involves

exploring within group differences, such as individual differences in degrees of masculinity and femininity for each sex. For instance, why is Mike more interested in working out at the gym than Joe, who would rather play the piano? Why is Michele more interested in dolls than Alissa, who would rather play soccer? These questions highlight the key components for the recognition of gender in one's self and in others, as well as the components for developing a cognitive organizational structure of gender.

Psychoanalytic theory. Before any clear qualitative distinction was empirically drawn between *sex* and *gender*, psychoanalytic theory proposed the first comprehensive personality theory summarizing the origins and characteristics of sex differences (Person & Ovesey, 1983; Tyson, 1982). Early psychoanalysts subscribed to the rigid identity standard of "males are masculine" and "females are feminine," and applied these early theories of sex differences to gender developmental models. Psychoanalytic theory of sex and gender identity development emphasizes biology and the importance of identification with the same-sex parent for the emergence of an appropriate sex awareness of the self and the corresponding sex-typed behavior. Freud proposed that the tensions emerging from the Oedipal complex (in boys) and the Electra complex (in girls) shape the child's heterosexuality, which is assumed as the only normative developmental trajectory of sexual orientation. In this theoretical perspective, homosexuality and trans identities are thus indicators of incomplete sex identity development, often attributed to faulty parenting.

Although it is the first sex and gender identity developmental model, there is little empirical support (Ruble et al., 2007). Gender nonconformity, at least in behavior and personality is not recognized as developmental arrest, but as normative variation in gender expression (Diamond, 2003a; Savin-Williams, 2005). Subsequently, researchers proposed that gender identity development was not a

process dictated simply by biological maturation, but instead from a complex interaction of biology and environment.

Cognitive-developmental theory. Cognitive theorists focus on how information is received, processed, and acted upon in the world through behavior. Heavily grounded in Piaget's cognitive-developmental model, Kohlberg (1966) proposed a cognitive-developmental theory of gender identity development whereby cognitions precede behaviors. Kohlberg recognized that a child's sense of gender constancy is a necessary prerequisite to understanding the sexual self and the sexual other. For example, "I am a boy, and I will always be a boy, even if I'm wearing a dress." Thus, *gender constancy* is the understanding of the permanence of one's sex. According to cognitive-developmental theory of gender identity development, children socialize themselves in gendered ways; that is they form a gender *role* only after they establish gender constancy.

In a behavioral study of children, Slaby and Frey (1975) found that children with an advanced understanding of gender spent more time observing same-sex models. In their three-stage model for gender identity development, Slaby and Frey suggested that children first develop a *gender identity*; that is, they learn to identify their own and others' sex through categorical labeling. Second, children develop a sense of *gender stability*; that is, they develop an understanding that biological sex remains stable over time. Third, children develop *gender consistency*; that is, the understanding that superficial changes in appearance (e.g. longer versus shorter hair, wearing pants versus dresses) do not affect one's categorical sex as male or female. According to Kohlberg (1966), gender constancy occurs when the child attains both gender stability and gender consistency. However, research validating Slaby and Frey's three-stage developmental model demonstrates vast disagreement (Ruble et al., 2007).

One recent study suggested that labeling occurs by age three, and that gender stability occurs between age three and five years (Ruble, Taylor, Cyphers, Greulich, Lurye, & Strout, 2007). Cognitive developmentalists argue that full gender constancy does not reliably emerge until the child demonstrates mastery of cognitive tasks, such as conservation, which emerges during the concrete operational period between ages five and seven years (Maccoby, 1990). Cross-cultural investigations support later ages of gender constancy development (Ruble et al., 2007). Perhaps these inconsistent findings were due to individual variation in children's learning about social norms (Szkrybalo & Ruble, 1999). In any case, such disagreement warrants further research exploring the developmental process of forming a gendered identity.

Gender nonconforming children provide some of the most compelling data for discerning gender identity emergence. Often, though not always, the child demonstrating gender nonconforming behavior reports that his true gender core identity does not match his biological sex (Zucker & Bradley, 1995). This may occur as early as age two (Money, Hampson, & Hampson, 1957) or three years (Strong, Singh & Randall, 2000), or as late as adulthood in samples of male-to-female (MTF) identified transsexuals (Doorn et al., 1994). In some of the earliest literature detailing gender identity formation in children, Money and colleagues concluded that there existed a critical period for gender identity development within the first two years following birth where gender identity developed in a manner similar to imprinting (Money et al., 1957). In contrast, although the adult MTF understands that biological sex is constant or immutable without surgical intervention, there is an awareness of a mismatch between gender identity and biological sex. Clearly, there is a need for continued research exploring the nuances in gender identity development as it differs from understanding the constancy of biological sex.

A major limitation of the cognitive-developmental theory, applied to trans people, is its conflation of sex with gender; that is, sex identity is defined as *gender core identity*. Second, cognitive-developmental theory does not expound on *why* children select schematic categorizations for sex and/or gender. Thus, cognitive theories of gender identity development do not explain *how* or *why* trans identifications occur, nor do they discuss *when* parents can anticipate the developmental emergence of gender nonconformity.

Do trans behaviors and identities emerge around the same time as gender developmental theories suggest for gender-typical behaviors and core identities? The literature on gender role and identity development might be used to generate hypotheses about the likely time periods in which specific events such as these might occur. Perhaps a more informative theoretical framework for gender identity development is proposed by social learning theory. This theory suggests that children learn sex-typed behaviors through same-sex behavior modeling and social reinforcement.

Social-learning theory. Proposed nearly simultaneously, yet in direct contrast to cognitive developmental theories of the 1960's, Mischel (1973) applied Skinner's social learning paradigm to a theory of gender identity development. This theory posits that gender identity develops as a result of social comparison and reinforcement. Children learn sex-typical gender roles and behaviors by modeling same-sex persons, often their same-sex parent. Consequently, children internalize the rewards and punishments they receive to shape their future behavior in culturally acceptable and sex-appropriate ways.

It follows then, that adults are teaching children from a very early age what sex-roles are appropriate and what are not appropriate. Empirical support exists for adult sex-stereotyping among infants. For example, one study asked a group of adults

to describe the emotional behavior of nine month-old infants who were startled by a Jack-in-the-box toy (Condry & Condry, 1976). Some adults were told the infant was a boy and others were told the infant was a girl. Participants who had been told the infant was a boy described the infant's reaction as anger. Thereafter, these adults were more likely to chose male type toys and encourage infant activity. Participants who had been told the infant was a girl described the infant's reaction as fear; these adults behaved more nurturing towards the infant. Clearly, perceptions and attributions about sex guide behavior towards others. The social learning model of gender identity development suggests that the child internalizes the expected roles and behaviors for its understood sex. The child, then, strives to meet its sex-appropriate and gender-role behavior expectations. Thus, perceptions also shape the development of sex-appropriate behaviors and an understanding of gender-role expectations. Perhaps unknowingly, adults actively shape infants' developing sense of gender from the moment the infants are born.

A notable difference between the cognitive-developmental and the social-learning models pertains to the role of the child in the developmental process. For example, cognitive theory posits that the child is like an active scientist that tests its environment in order to conceptually organize its existence in the world. In contrast, the social learning model suggests that the child is a passive learner. Both cognitive developmental and social learning models are descriptive regarding how gender identity forms congruently with biological sex. Missing from both models, however, is the explanation for how gender nonconforming identifications develop, particularly if the nonconforming behavior incurs punishment, social isolation, or negative mental health consequences of cognitive discord (Katz & Farrow, 2000; O'Heron & Orlofsky, 1990).

Cognitive-developmental and social-learning theories of gender assume that masculinity and femininity are polar opposites of the same gender continuum. In contrast, recent empirical research with trans populations suggest using a multiple continuum framework that allows for simultaneous parallel continuums for biological sex (more to less female and more to less male), gender identity (man to not-man and woman to not-woman), and gender expression (more to less masculine and more to less feminine) (Doorn et al., 1994; Girshick, in press). Bem's gender schema theory (1981, 1983) offers a framework for understanding the construction of gender in specific cultures as a variation along differential developmental trajectories.

Gender schema theory. A *schema* is a mental structure integrating information, observations, ideas, and cognitive associations. Gender schema theory (Bem, 1981, 1983) offers a modified framework of the cognitive-developmental and social-learning theories of gender identity development that explains how and why sex becomes a central organizing construct. Borrowing developmental conceptualizations from each theory, *gender schema theory* establishes that gender is organized into schema from observations made in the social world. Thus, sex and gender become ways of structuring and understanding one's place in the world, particularly as a means to guide sex-typed behaviors.

Sex-typing is the acquisition of sex-congruent preferences, skills, personality attributes, behaviors, and self-concepts. In this paradigm, the child learns the categorical distinctions of maleness and femaleness. The child also organizes the features associated with being male and female (i.e., biological sex) including anatomy and reproductive capacity, as well as the gender presentation associated with facial structure, hair style, dress, division of labor, and personality traits. Subsequently, the child recognizes that it can use this web of organized information to process new information; that is, it develops and uses the gender schema.

A central distinguishing feature of gender schema theory is that the child is portrayed as an active processor of social cues. The child selects gender cues that are self-affirming from a set of observed personality attributes.

> Sex-typed individuals are seen to differ from other individuals not primarily in the degree of femininity or masculinity they possess, but in the extent to which their self-concepts and behaviors are organized on the basis of gender rather than on the basis of some other dimension (Bem, 1993, p. 605).

Here, Bem indicated an additional limitation to cognitive developmental and social-learning theories, namely that sex is identified as the central organizing domain without regard or explanation for why or how a person's developmental identity is not shaped around any other identifying construct such as race or religion. Bem recognized that through cognitive schemata, a person can replicate such organizing principles to an unlimited number of identifying domains.

Despite the paradigm shift implied by gender schema theory, several questions remain unresolved. How do trans people conceptualize their gender identities? Are trans people centralizing their identities around alternative domains such as dress style, physical appearance, behavior, or partner preference? How do trans people negotiate the constancy of their biological sex with a conflicting gender identity schema?

Gender is often overlooked as a social construct and taken for granted to develop in accordance with biological sex. The extant models of gender nonconforming identity development emerged from the psychosocial and sexual identity literature. Thus, before I address several unresolved questions regarding trans identity development, I review basic identity theory, psychosexual identity, and sexual identity development models. I then return to explore three different models of gender

nonconforming identities: the traditional medical model of transsexuality (Green & Money, 1969; Hoenig, 1985; Zucker & Bradley, 1995), a contemporary model of transsexual identity development (Devor, 2004), and the transgender model (Bornstein, 1994; Boswell, 1991; Denny, 2004; Rothblatt, 1994).

Gender as an Identity

Identity theory and self-discrepancy. Identity theory (Stryker & Burke, 2000) and self-discrepancy theory (Higgins, Bond, Klein, & Straumann, 1986) offer a fresh conceptual framework with which to understand the structure and properties of trans identities. Identity theory, which first emerged in the mid 1960's, consists of two conceptual strands and posits four basic tenets (Burke, 1991; Stryker & Burke, 2000). The two conceptual strands of identity theory are the structural approach and the cognitive approach. In the *structural approach*, social contexts organize identity constructs, such as society's stereotypes of men's and women's roles. Current research supports a predominant structural approach in Western culture (Condry & Condry, 1976; Tewksbury & Gagne, 1996); however, research is still warranted to apply these theories and findings to samples of trans and gender nonconforming-identified persons. Theoretically applied to gender nonconforming persons, the structural approach would suggest that society dictates what constitutes male and female by accepting a defined set of sex-gender congruent roles and behaviors. Thus, the natal female who rejects her birth sex and gender assignment and who assumes male roles, men's clothing, and male appearance may be more likely to assume a transsexual or a trans gender identity. This person may also be more likely to seek out or create situations where that identity can be expressed.

In the *cognitive approach*, the internal, cognitive identity processes validate or signal discrepancy between the stereotype and the self-ascribed identity meaning.

Thus, for the same transsexual example above, there would exist internal cognitive and/or emotional distress regarding biological sex and developed gender identity. Thus, in the cognitive approach, identity is understood as being embedded in and affected *by* the external social contexts. Both approaches underscore identity's interdependency with roles and behavior through meaning. Although there is ample medical literature supporting the existence of emotional and psychological distress in the gender nonconforming population (American Psychological Association, 2000; Lev, 2004; Menvielle & Tuerk, 2002; Zucker & Bradley, 2005), few studies explore how meaning may *positively* influence gender nonconforming identity development, or how meaning is understood and incorporated to inform resiliency. In general, there is a great need for research exploring normative trends in gender nonconforming identity development.

The four basic tenets of identity theory include the identity standard and its meaning, the comparator, the degree of discrepancy, and behavior. Applied to gender nonconforming persons, a culturally prescribed *identity standard* consists of the identity stereotype males are masculine and females are feminine. In an oversimplified example, if the gender nonconforming natal female is overwhelmingly masculine and not at all feminine, she may understand that a female gender identity is less meaningful than a more masculine gender identity. *Meaning* is the importance or significance of the self-selected identity label. Second, the *comparator* is the mechanism of comparison by which this masculine identified natal female compares herself with the identity standard for other females and other males. These comparisons may be linguistic, cognitive, and/or physical (appearance) (Stryker & Burke, 2000). Third, the *degree of discrepancy* explains the degree of matching between the self-ascribed identity meanings and the identity standard in a given context. Thus, if the masculine identified natal female does not find societal standards

for females fitting her self-ascribed gender meaning and identity, she may experience high identity discrepancy with the female social standard and lower discrepancy with the male social standard. Fourth, the degree of discrepancy results in *behavior* (i.e., the daily enactments of one's identity). Therefore, the masculine identified natal female may be more likely to engage in male-typed behaviors and gender roles.

Research testing self-discrepancy theory (Higgins et al., 1986) demonstrated that the degree of difference between the identity meaning and the identity standard can have negative consequences on mood (Grimmel, 1998; Higgins et al., 1986), mental health (Heidrich & Powwattana, 2004), and even the experience of pain (Waters, 2004). Lower discrepancy, or a greater match between self-ascribed meaning and the identity standard, results in greater positive emotions or fewer negative emotions (Burke & Stets, 1999). In contrast, the larger the discrepancy, the greater the risk of negative emotions including anger (Stets & Tsushima, 1999) or depression (Burke & Stets, 1999). Moreover, higher discrepancies lead to lower commitment to that identity (Burke & Stets, 1999). Research in clinical samples of gender nonconforming and transgender identified males, for example, have demonstrated poor mental health and well-being outcomes including elevated depression and anger due to gender nonconforming identity when compared to other sexual minority groups such as gay men (Sjoberg, Walch, & Stanny, 2006; Weinrich, Atkinson, McCutchan, Grant & HNRC, 1995).

Self-discrepancy and identity theory have yet to be applied to explore the structure and properties of trans identities or developmental trajectories. Rather, the identity development literature for trans identities emerges from sexual identity models, which are rooted in Erikson's psychosocial theory of identity development (1959/1980).

Psychosocial identity development. In the 1960's Erikson emerged as a leading researcher in the developmental process of identity formation with his eight-stage model of psychosocial development. Erikson's (1968) work suggested that during adolescence, the main developmental task is to answer the question, "who am I?" Any individual still at disequilibrium about one's self after adolescence was said to be experiencing a "crisis" (Erikson, 1959/1980). Self-discrepancies, as evidenced by depression or anger, may be an early signal of such a crisis.

Erikson's fifth stage of identity formation (identity vs identity confusion) coincides with the onset of puberty when the rapid onset of physical change challenges the sameness and continuities once relied on during childhood. As an adolescent, the task is to establish a sense of autonomy, initiative, and secondary skill development. However, the adolescent is also entering a new and unknown territory between childhood and adulthood that is said to be wrecked with change and choice (Steinberg, 2001). During this time the adolescent tries to maintain a sense of balance while accepting the responsibility of forging a sense of identity and the self. Erikson (1959/1980) believed that adolescents are constantly questioning how to connect their own knowledge and experiences with their perceived ideals of their culture and society, and that they are gauging their own progress as they succeed in consolidating a new sense of self in line with these ideals. Erikson also described how adolescents slow the pressure on themselves to enmesh with a more robust, intimidating older and strange adult society by forming cliques or in-groups whereby they can experience stages of sameness with each other until they feel better prepared to mature into these societal ideals.

Sometimes, however, adolescents do not maintain the same ideals for themselves as those imposed on them by society. As is arguably the case for gender nonconforming persons, these adolescents may feel unable to resolve the growing

discrepancies between their developing sense of self with society's ideals. Thus, Erikson's model suggests that gender nonconforming adolescents maintain a sense of crisis and will continue in a state of identity diffusion until they resolve the discrepancies between sex and gender identity. Thus, perhaps it is not the *nature* of gender nonconforming identities that suggest inherent developmental crisis, but rather the anguish, energy, and consciousness of the identity-supporting *process* with which sexual and gender minority individuals must negotiate. For example, adolescent gender nonconforming persons perhaps spend a longer period of time negotiating the inconsistencies between their developed childhood ego identity characteristics and the rejected non-ideals imposed on them by society.

Sexual orientation identity development. Sexual orientation is an enduring erotic, romantic, sexual, or affectionate attraction towards members of the same sex, the opposite sex, both sexes, or neither sex (Savin-Williams, 2005). It may be grouped under the larger umbrella term "sexuality," but it differs from other components of sexuality including but not limited to gender identity and *gender role*, which is behavior typically associated by society as masculine or feminine. *Sexual identity* is any socially recognized *label* that organizationally names sexual feelings, attractions, and behaviors. The acronym LGBTQQ encompasses many of the current socially recognized sexual identities including lesbian, gay, bisexual, transgender, queer, or questioning.

Similar to the polarized medical conceptualizations of gender for man and women, initial research on sexual identity described a categorical *distinction* between proportions of heterosexual and homosexual sexualities, and regarded homosexuality and heterosexuality as opposites on the same continuum (Fausto-Sterling, 2000; Kinsey, Pomeroy, & Martin, 1948). However, subsequent research demonstrated inconsistencies among sexual attractions, behaviors, and identities (Laumann, Gagnon,

Michael, & Michaels, 1994; Lippa, 2000; Savin-Williams, 2005). In once such instance, psychologist Sullivan (1953) reported instances in which preadolescent close friends engaged in same-sex sexual behaviors, but this conduct had little impact on their observed current or future sexual identities as otherwise being hetero-normative. Thus, the conceptual battle between dichotomy and spectrum sentiments is not new in the medical community. The front has only expanded.

To better investigate the developmental processes of negotiating sexual orientation identities, Cass (1979) developed a six-stage linear model of homosexual identity formation. Her six stages represent the processes that same-sex attracted people go through to resolve the underlying crisis of incongruence of self-perceptions, behaviors, and attractions to the perception of others' attitudes towards them. Western culture's *heterosexism*, which assumes heterosexuality is the norm to which all other sexual identities are formed in opposition is embedded in Cass's model. According to Cass, individuals enter Stage 1 when they first recognize homoerotic feelings and begin feeling that their sexual orientation identity exists incongruently with the *heterosexual* norm. In the subsequent stages the person explores their homoerotic attractions through social comparisons (Stage 2). The person proceeds through stages of believing one is *probably* homosexual then *likely* homosexual (Stage 3), not fully accepting of this identity until the end of Stage 4. In Stage 5, an individual becomes more comfortable with a homosexual identity and begins to incorporate this identity into the composite of the self, culminating in a sense of pride (Stage 6) where Cass reports complete synthesis and integration of *sexual* orientation identity into *self*-identity. Thus, reaching Stage 6, sexual orientation identity becomes one of many factors that make up the self. For example, an individual no longer says, "I am a gay-person", but instead "I am a person who happens to be gay."

Unlike Erikson's psychosocial model of identity development, which argues for fluid developmental transitions, Cass' linear model posits that a person does not revisit an earlier stage. There exist several additional limitations; first, its generalizability is restricted to gay and lesbian identities and not bisexual or asexual identities because it has not been validated in these groups. Moreover, with one exception that was exploratory and more theoretical than empirical (Devor, 2004), Cass's model has not been empirically validated in transgender populations. In a later section, I address the implications of Devor's (2004) model as an early framework for transgender identity development.

Recognizing that sexual identification may be a complex, fluid, and open-ended developmental process that occurs within various contexts simultaneously over the life course, D'Augelli (1994) proposed a six-stage sexual orientation identity model. First, an individual exits the assumed given heterosexual identity. Second, s/he develops a unique sexual minority personal identity, learning *how* to be non-heterosexual from other same-sex attracted persons. Third, s/he develops a sexual minority *social* identity by consolidating a support network of other same-sex attracted persons. Fourth is a reconciliation with family stage whereby s/he recognizes one's place as a family member and strives to heal the rifts incurred from coming out as same-sex attracted. Fifth, s/he develops meaningful physically and emotionally intimate relationships. Finally in the sixth stage, the individual forges greater community ties and focuses energy on political and social action issues to better one's place in society. Because D'Augelli's model incorporates both personal and social identity characteristics, his model has also been used to understand gender identity development (Bilodeau & Renn, 2005).

Proposing an alternative to the stage model approach to sexual identity development, and recognizing how little is known about same-sex attracted youth,

Savin-Williams' discussed at length how today's adolescents and young adults are coming out at younger ages with a more fluid concept of their sexual identity. His *differential developmental trajectories (DDT)* framework recognizes that:

- There is inherent variability within and across individuals.
- All persons experience a developmental process of identity formation, and various milestones occur throughout that developmental process.
- Given the absoluteness of human variation, a theoretical framework must also consider and account for individual pathways of development.

Thus, Savin-Williams suggested that although there may be similarities in the developmental experience of same-sex attracted and other minority identified youth, one model will not suffice in accounting for individual variation in development. Whereas Cass' model suggests that the inherent struggle to negotiate an objectionable identity in society may be contributing to depression and anxiety among same-sex attracted youth, Savin-Williams' DDT framework successfully explains how the sexual minority youth's movement away from restrictive "identity labels" serves to bolster a growing sense of confidence and pride. Researchers that sampled from college student communities as a whole found that students may harbor same-sex attractions but not sexual orientation identity labels of "gay," "lesbian," "bisexual," or even "queer" (Diamond, 1998, 2003a; Bilodeau & Renn, 2005; Savin-Williams, 2005). Moreover, contemporary empirical research with same-sex attracted youth demonstrates that this group is an increasingly stable, well-adjusted population of ordinary teens who are not the depressed and suicidal adolescents traditionally portrayed a decade ago (Savin-Williams, 2005).

Gender Nonconforming Identity Models

The prefix *trans* is Latin for to change, shift, or cross through from one place, person, or thing to another (Merriam-Webster Online Dictionary, 2007). It is also used in reference to transgender, transsexual and persons with gender nonconforming identities (Carroll, Gilroy, Ryan, 2002). *Sexuality* represents a myriad of behaviors, practices, and identities existing in a social context (Carroll et al., 2002). Thus, *transsexuality* is a rejection of one's birth sex and identification with the opposite sex, presenting sex-typed behaviors, practices, and identity conceptualizations in accordance with expectations of the opposite sex. Note the contrast with *transgender,* which has often been used as an umbrella term recognizing a range of behaviors, expressions, and identifications challenging the binary sex system of male and female (Prince, 2005).

The medical model. The medical community spearheads much of the research on transsexuality and *gender identity disorder (GID)*, a term used by psychiatrists to identify persons with incongruence between their physical sex and their gender identity (American Psychiatric Association, 2000; Carroll et al., 2002; Meyer et al., 2001). In contrast with transsexuals, people diagnosed with GID may not intend to physically transition. They do, however, express trans identifications by stating a deep desire to be the opposite sex (American Psychiatric Association, 2000; Zucker, 2005). According to the most recent version of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), GID is characterized by "a strong and persistent cross-gender identification" by a "persistent discomfort with [one's biological] sex or a sense of inappropriateness in the gender role of that sex," and by "clinically significant distress" (APA, 2000; p. 581). Cross-gender identification may also be demonstrated by preferences for gender nonconforming roles in fantasy play, for wearing the

clothing of the opposite sex, and/or the desire to engage in activities associated with the opposite sex.

In 1980, following the removal of homosexuality from the DSM, “Gender Identity Disorder of Childhood (GID-C)” emerged. This diagnosis identifies an increased visibility of gender nonconformity, particularly in boys, and a growing concern for the trans individual’s mental health. In 1994, the DSM-IV collapsed *Transvestitism* into the “Gender Identity Disorder” (GID) diagnosis, and distinguished GID of childhood from GID, which persists into adolescence and adulthood (APA, 2000; Zucker, 2005). The GID criteria are still, however, relatively novel to the medical community. Much of the research has typically focused on discrimination, heath and service access, major health challenges such as HIV, surgical outcome, and mental health concerns (Lev, 2004). Thus, the medical model conflates sex and gender and recognizes gender within a binary construct of two extant sexes, male and female. People who reject the gender associated with their birth sex may in extreme cases be considered gender dysphoric and may be evaluated for Gender Identity Disorder.

The past three decades have seen a rapid increase in medical gate keeping of sex reassignment surgeries and the distribution of hormone treatment to individuals with transsexual identification who maintain heterosexual sexual orientations post-transition (Denny, 2004; Seil, 2004). Thus, the medical model does not leave room for the range of trans identities and sexualities that may exist. With few articles investigating the characteristics and development of trans identities, particularly in biological females (Devor, 1993), there is still work to be done.

Benjamin, well known as "Father of Transsexualism" (Schaefer & Wheeler, 1995), helped to pave the way for a new discourse on sex-typing and gender identity development. Benjamin’s first ten clinical cases of transsexuals ranged in age from 20 to 60 and were clinically evaluated between 1920 and 1953 (Schaefer & Wheeler,

1995). These patients all possessed similar cognitive, behavioral, and affective characteristics that are still commonly found in today's transsexual identified individuals, including early gender confusion, cross-dressing behavior, desire to be of the opposite sex, body discomfort, secrecy, isolation, and feelings of guilt (Doctor & Fleming, 2001; Lippa, 2001; Schaefer & Wheeler, 1995).

Recent research validates Benjamin's findings in samples of FTM transsexuals (Devor, 2004) as well as FTM transsexuals (Bockting, Knudson, & Goldberg, 2006). One study of gender-dysphoric males investigating the effects of gender dysphoria on behavior, clothing preference, and medical treatments (Rosen, Reckers, & Brigham, 1982) found that adolescent gender-dysphoric boys did not re-learn how to be more gender typical. Another observational study showed that dress was not a predictor of activity choice (Kaiser, Rudy, & Byfield, 1985). For example, all subjects associated dresses to stereotypically feminine activities and pants to stereotypically masculine activities. Wolfradt and Neumann (2001) found that MTF transsexuals had higher levels of self-esteem and more positive body images after physical transition to the other sex and into womanhood than before surgery in their biologically male bodies. What leads to these resilient outcomes? Research with sexual minority populations have turned to variations in developmental processes (Diamond, 1998; Savin-Williams, 2005). Thus, perhaps the answer lies in a closer investigation of developmental pathways in transgender populations.

Devor's model of transsexual identity development. Devor (2004) proposed a theoretical model for the formation of transsexual identities based on the sexual identity development work of Cass (1979) and Ebaugh's (1988) "role exit" theory. His 14-stage model outlined the developmental and social themes involved in the process of forming a transsexual identity. According to Devor, "Each of us has a deep need to

be witnessed by others for whom we are. Each of us wants to see ourselves mirrored in others' eyes as we see ourselves" (Devor, 2004, p 4).

Devor's model mirrored Cass's by summarizing identity development as progressing from early confusions and social comparisons to self-acceptance, identity synthesis, and pride. However, applications to transsexual populations required additional periods of comparisons and acceptance before reaching identity integration and pride. For example, in Stage one, *abiding anxiety*, is when the person is not focused on one's own gender and experiences discomfort with one's own sex. During this stage the person demonstrates a preference for cross-gender activities and companionship. Then in the *first identity confusion,* the person typically struggles between the negotiation of birth-sex assignment and the expected sex-typical role behaviors. Next in the *first identity comparison,* the person compares his assigned birth-sex with his preferred gender roles, and if discrepant, begins actively seeking out and experimenting with alternative gender expressions and identities. Fourth is gender identity *discovery.* This is when the person accidentally or intentionally learns more about the existence of transsexualism and becomes increasingly aware of the appropriateness of accepting a transsexual identity. During the fifth stage, the person experiences *second identity confusion* and increases in self-awareness about one's own transsexualism. After seeking more information about transsexualism, the person begins a *second identity comparison* stage where the person dis-identifies with birth-sex and re-identifies as "transsexed" or as "transgendered." In stage seven, the individual enters a space of *identity tolerance* and furthers the process of dis-identifying with birth-sex assignment. Devor then noted that there is typically a developmental *delay*, in stage eight, where there is continued exploration of this new found trans identity before finally accepting and disclosing it to others. Stage 10 is a *second delay* during which the person organizes a support system, saves money for

potential transition, and learns from others how to socially transition into one's new sex and gender role. Stage eleven culminates with the surgical and hormonal *transition*, and stages twelve through fourteen consist of forging *self-acceptance*, body- identity *integration*, and a sense of *pride*.

Although Devor's model was the first to propose a developmental framework specific to transsexual populations, there are several limitations. First, comparable to several sexual minority identity models, Devor's model of transsexual identity development is theoretical, and has not been empirically validated, leaving several questions unanswered. For example, do all trans-identified people experience these developmental milestones? Perhaps those who do not have *transsexual* identities but rather other gender nonconforming identities differ in their developmental experience or ordering of these stages. Perhaps not all transsexuals experience these stages in the suggested order; perhaps some never experience one or more of these stages; perhaps some progress more rapidly than others through the stages; perhaps some halt and repeat stages several times; perhaps some still consider themselves transsexual or transgendered and never have experienced any of these stages.

There is, however, increasing interest in transgender development. For example, one recent study of identity milestones among trans identified adolescents reported that these adolescents recognized sex-gender identity mismatch as early as age 10. Trans identity selection occurred shortly thereafter around puberty (age 14), and during adolescence, first public disclosures of trans identities co-occurred with first reported confusions about gender and sexual orientation identities (Grossman & D'Augelli, 2006). Although this study did not formally intend to validate Devor's model of transsexual identity development, there is some preliminary evidence that sex-gender confusion and identity exploration do occur developmentally early. However, there was no data regarding social comparison behaviors, and timing of

identity acceptance, integration, or pride. Clearly, more research is needed to validate theoretical models of trans identity development.

Overall, despite providing some of the first descriptive data regarding transgender developmental milestones, Grossman and D'Augelli's (2006) study has several empirical limitations that prevent the generalizability of their findings. First, the authors used a small convenience sample from selective metropolitan organizations within New York City. Granted, this is a common limitation in research with marginalized communities. The use of internet sampling, however, may have provided a more effective method for sampling hard-to-reach populations (Rosser et al, 2007). Second, participants were already out in the trans community and were participating in the public organizations from which the authors recruited. Perhaps these findings are not generalizable to trans people who have not yet "come out" to others. In addition, 83% of the sample reported a male birth sex. This sample clearly represented only a fraction of the trans population. Thus, the results were overall nonrepresentative, and not generalizable to trans biological females. Third, the data were collected in focus groups that met only once. It is likely, given the mean age of the study's sample participants (16.5 years) that the respondents' identities were still in transition. Overall, limited peer-reviewed publications have explored gender identity development in trans biological females. Clearly, these limitations suggest the need for more research in this area.

Thus, despite recent advances, there are still many gaps in the empirical literature regarding the structure, properties, and developmental trajectories of persons with trans identities. Moreover, since the first published reports emerged in the medical literature in the 1950's describing transsexuality, other disciplines have explored a greater spectrum of gender and sexuality. For example, recent sociological and psychological research is expanding our understanding of trans identities to

include a greater range of behaviors and identity conceptualizations including (but not limited to) gender blender, gender bender, gender outlaw, gender queer, drag king/queen, trans, transgender(ist), and queer (Carroll et al., 2002; Devor, 1989; Ekins & King, 1996; Feinberg, 1998; Rosser, Oakes, Bockting, & Miner, 2007).

The transgender model. In contrast to the medical model and Devor's model of transsexual identity development, which both emphasize the sex binary, the transgender model supports the existence of a parallel gender continuums inclusive of male *and* female dimensions, while also leaving room for neither (Denny, 2004). In addition, rather than one prescribed model for gender identity development, it proposes *individualized* gender trajectories, similar to a differential developmental trajectories approach to sexual orientation (Savin-Williams, 2005). Thus, the successful achievement of identity is not in completing sex reassignment surgery but in the overall emotional and cognitive stability with one's self, regardless of identity label or physical appearance. Lastly, in contrast to the medical model, the transgender model posits that gender nonconformity is a form of natural human variability and not a mental disorder. There is limited information on the transgender model as to date it has not been validated in empirical research.

Several questions remain, as little empirical work validates this model (Gagne et al., 1997; Grossman & D'Augelli, 2006; Bilodeau & Renn, 2005). For example, does a multidimensional spectrum of gender identity exist or does the range of trans identities vary by more or less male to more or less female? Are trans labels unique gender identities that represent differential developmental trajectories, or do they represent stages of a fixed developmental sequence?

Applied Research with Gender Nonconforming Communities

Emerging from the seminal work of Green (1987), early descriptive findings regarding the developmental milestones and contextual experiences of trans youth demonstrate that feminine gender identities emerge developmentally early among natal male transsexuals (Doorn et al., 1994). However, the study participants typically did not actualize their trans identities until much later into adulthood.

Conducting interviews over a one-year period, Gagne and colleagues (1997) included a spectrum sample (n=65) of masculine-to-feminine self-identified trans persons, including pre-, post-, and nonoperative transsexuals, cross-dressers, and gender radicals (i.e., self-identified radical transgenderists, third genders, and ambigenderists). Gagne and colleagues (1997) accounted for the scant literature on trans identities aiming to reify traditional identity categorizations imposed on the trans community by non- trans people, most notably by the medical community. Thus, using the identities as reported by the participants, the authors reported that: *transsexuals* (TSs) were the biological male participants who believed they were female and who either wished to or already lived full-time as women. *Preoperative* TSs desired to have, but had not yet had sex reassignment surgery (SRS) (i.e. vaginoplasty; Selvaggi, Ceulemans, De Cuypere, VanLanduyt, Blondeel, Hamdi et al., 2006). *Postoperative* TSs completeed SRS; *nonoperative* TSs lived socially as women but had no desire to pursue SRS, though many may used female hormones, had breast implants, and/or pursued other procedures to pass more frequently as women. *Radical transgenderists* were heterosexual biological males that maintained a masculine gender identity, but who used cross-dressing to challenge the traditional gender dualistic construct and to explore feminine aspects of personality. *Ambigenderists* lived alternately as men and as women, and conceptualized sexual orientation as a

spectrum of attractions. *Third genders* publicly presented both aspects of a masculine and feminine self and lived as a combination of both genders (Gagne et al., 1997).

Gagne and colleagues' data suggest a temporal order to pertinent developmental milestones marking TGNC identities. Similar to D'Augelli's (1994) model of sexual orientation, participants first reported early awareness or feeling something "wrong" or out of sync with one's sex or gender (p. 486). Some of the participants experienced this discord in early childhood, but most reported feeling out of place in adolescence or adulthood. Second, participants experienced internal struggle to develop a sense of "true self" (p. 489) while negotiating feelings of guilt, shame, pressures to conform, and secrecy. Third, participants described a coming out process informed by experience that their emerging identity was "wrong," despite discovering others with similar experiences and names (i.e., identities) for their feelings. Learning about trans communities precipitated first disclosures of trans identities. Lastly, there were many ways to resolve identity exploration and commitment.

Using a life span identity approach anchored in D'Augelli's (1994) framework, and similar to previous work (Gagne et al., 1997), Bilodeau and Renn (2005) reported that sexual orientation and gender identity are separate yet interacting constructs; trans identified persons can report a range of sexual identities influenced by one's gender identity. The authors reported that participants experienced a gradual process of identity development marked by parallel negotiations of gender and sexual orientation identities. These findings gave the authors pause because although there were similarities between coming out as a sexual minority (e.g., gay) or a gender minority (e.g., transsexual) (Cass, 1979; Devor, 2004), sexual orientation models did not provide an appropriate framework for constructing trans identities.

Limitations of Current Identity Models

The reviewed research represents an initial effort towards clarifying trans developmental processes and illuminating the complex, non-pathological identities that exist in trans communities. There are, however, several limitations. First, Gagne and colleagues' (1997) sample consisted entirely of biological male participants. Would the same developmental trajectories apply to a sample of biological female participants? Second, Bilodeau and Renn's (2005) sample was small, consisting of seven people only two of which identified as transgender. Such a small and non-representative sample makes it impossible to generalize their results. Thus, there is need for replication with larger samples including natal female participants.

The current models of gender identity development are inadequate explorations for summarizing trans biological female experiences. Despite extensive focus on the individual processes, current identity models including sexual identity models, make gross assumptions that inhibit their application to trans persons. These include binary sex constructs, polarized gender roles (masculine to feminine), and implication that traditional group categorization is better than construction or maintenance of unique gender conceptualizations.

Stage models of identity development pose additional limitations for trans persons. For example, current demographic sampling forces trans respondents to *choose* the sex group of best fit at a given time. Most surveys do not offer participants "transgender" or "intersex" as a gender option. Moreover, surveys only ask about biological sex for demographic purposes; they do not include sex and gender as separate questions. Trans identified persons can have an array of sexual orientation identities. A *lesbian,* thus, may or may not include a biological male with a woman gender identity who may or may not have already pursued surgical or hormonal feminization. Future research must begin to parse out these demographic differences,

particularly for developmental research as identities do change over time (Diamond, 2003a).

Despite these limitations, the dearth of research on trans persons suggests several unresolved questions for empirical investigation. For example, do trans persons reject the binary sex system? If so, what structure exists? If not, do they choose what sex group is most relevant for resolving their gender identity discrepancies? Are trans persons rejecting their birth sex or are they reconciling birth sex with novel gender identity constructs to create new meanings for extant identity labels?

Several methodological limitations also need to be addressed. Research among trans communities should aim to recruit participants from a range of identity groups (e.g., MTF, FTM, cross-dressers, drag kings, drag queens, tranny fags, male or female impersonators, gender queers, bigenders, gender blenders, and two-spirits) (Grossman, D'Augelli, Howell, & Hubbard, 2005; Hill, 1999; Rosser et al., 2007). Research should include diverse socioeconomic and racial and ethnic backgrounds, and should establish unbiased operational definitions. Rosser and colleagues (2007) demonstrated that the Internet serves as an important method for supplementing community-based and clinical studies among trans populations in the United States. The Internet is more advantageous for recruiting people who are geographically isolated from urban centers where much of the current transgender research takes place. Although the Internet does not account for the socioeconomically disadvantaged who lack access, it does allow participant flexibility compared to offline studies. Moreover, the anonymity provided by Internet screen names provides a space in which trans participants can respond to personal inquiries without direct identification (Rosser et al., 2007).

RESEARCH QUESTIONS AND ANTICIPATED FINDINGS

The purpose of the current investigation was two-fold. First, I systematically addressed the current gaps in the empirical literature regarding trans identities by surveying the identity labels currently used, the meanings of these identities, and how they were expressed in dress style and physical appearance. Second, I investigated the developmental trajectories of gender variant natal females' gender and sexual identities. The current investigation aimed to extend the recent work of Grossman and D'Augelli (2006) by expanding the knowledge of developmental milestones and themes to a larger sample of trans biological females. This research also aimed to extend Devor's (2004) theoretical model of transsexual identity development by exploring identity development in a more diverse sample of trans biological females.

As evidenced by the aforementioned gaps in the literature regarding gender nonconforming individuals, particularly among natal females, this research was predominantly exploratory in nature. The goals of the current research were three-fold: First, was to document the *range* and *variety* of gender and sexual identities that exist within this cohort of gender nonconforming natal females. Second, was to conduct one of the first explorations of the interaction between gender identity and sexual orientation. Third, was to extend the current body of literature on gender nonconforming persons by validating the only known theoretical model of transsexual identity formation with developmental data from a diverse sample of gender nonconforming natal females. Using Denny's (2004) transgender model of identity conceptualization and Savin-Williams' (2005) differential developmental trajectories framework, I anticipated the following:

- Data will demonstrate multiple identity labels that embody an organized construct of gender and sexual identities.

- Data will demonstrate a range of novel gender and erotic identities.
- Emerging identities will range on two parallel continuums of more or less male *and* more or less female.
- Gender identity and sexual orientation identity will emerge as independent constructs.
- Data will demonstrate differential developmental trajectories rather than one linear model of gender identity development.

METHOD

Participants

Participants were 170 gender nonconforming natal females. The mean age of the sample was 28.7 years (SD=9.53, range: 18-56 years). Inclusion criteria consisted of being at least 18 years of age; receiving a female birth-sex assignment; and identifying as transgender, transsexual, gender queer, or anywhere along the spectrum of self-identified gender nonconformity. Participants completed a questionnaire assessing the naming, expression, and development of gender and sexual identities. Demographic factors included age, ethnicity, level of education, current occupation, current annual income, and birth sex assignment.

A majority of the sample was Caucasian and the mean and median current annual income was $20,000 or less. Fifty-nine percent of respondents reported having at least a college degree, and a majority reported a current occupation of "student." Additional demographic details are summarized in Table 1.

A total of 299 surveys were completed; of these, 289 were online and 10 were paper surveys returned by mail. Ninety-five respondents were excluded for reporting a male birth-sex assignment, 19 were excluded for being under 18 years of age, and 15 were excluded due to insufficient data for gender identity analysis. Thus, the final sample consisted of 170 gender-variant natal female participants.

Table 1. Sample demographics

Demographic	N	%
Education		
None	0	0
Grade School	1	1
High School	50	30
College/ University	60	35
Graduate/Professional	43	25
Other	16	9
Ethnic Background		
Asian/Pacific Islander	5	3
Biracial/Multi-cultural	12	7
Black/African American	3	2
Hispanic, Latino/a, Chicano/a	3	2
Native American	1	1
White Non-Hispanic	146	86
Other	0	0
Current Annual Income		
None	10	6
Less than $20,000	84	50
$20,000-$40,000	45	27
$40,000-$60,000	21	12
More than $60,000	9	5
Sex Assignment at Birth		
Female	167	98
Intersex (assigned female at birth)	3	< 1
Current Occupation		
Administration/Management	23	14
Education/Outreach	12	7
Student	72	42
Professional	13	8
Retail	4	2
Service Sector	23	14
Unemployed	14	8
Other	9	5

Procedures

Participants were recruited using respondent-driven (Heckathorn, 1997) and community-based targeted sampling methods that were intended to provide diversity and stable population networks needed to achieve adequate representative sampling. (Ammerman, Corbie-Smith, St. George, Washington, Weathers, & Jackson-Christian, 2003; Clements-Noelle, Marx, Guzman, & Katz, 2001). The survey was distributed in both online and paper versions that were identical in content. Self-addressed stamped envelopes were included with the paper copies for return to the researcher. Settings for flyer distribution included community centers specializing in gender-variant communities (e.g., the Gender Identity Project in New York City); lesbian, gay, bisexual, and transgender student centers and groups in North America (e.g., Cornell's LGBT-L listserve); national conferences and professional meetings (e.g., Gender Odyssey Conference); public events and community gatherings (i.e., Pride Festival); personal contact networks; and online to special interest listserves (e.g., FTM International). All online and paper recruitment postings listed the survey hyperlink that directed participants to a website portal to complete the online version of the survey. Paper recruitment postings listed the survey hyperlink on removable tabs.

Respondent-driven sampling, a chain-referral sampling method, began with the researcher's personal contact networks. Network members were asked to forward the online version of the consent form that described the study in detail and provided a hyperlink to the online survey. The investigator's contact information was also provided on the consent form, flyers, and study announcements for those persons who did not have access to a computer. All respondents were given detailed information about the nature of the study in advance of participation with an informed consent

form approved by a University Committee on Human Subjects (see APPENDIX B). Participation was anonymous, confidential, and voluntary. Respondents were not compensated for their participation. Completion of the survey was considered consent to participate. Given these methods of recruitment, it was not possible to determine a response rate because it is unknown how many individuals saw the survey and chose not to participate. Over 300 paper surveys were distributed and 10 were returned for a hard-copy response rate of less than 3%. Questions of external validity will be addressed in the Discussion.

Measures

Validated measures exist for measuring masculinity/femininity (Bem, 1974), self-report assessments of respondents' personal sexual identity label (Kinsey et al., 1948), and retrospective cross-gender identification in a clinical sample (Zucker, Mitchell, Bradley, Tkachuk, Cantor, & Allin, 2006). However, no validated measures of assessing the range and variety of gender identity labels, conceptualizations, or differential developmental trajectories of identity formation exist for gender nonconforming natal females. Thus, although standardized measures provide greater objectivity and quantification, a survey was designed to elicit the spectrum of trans and other gender nonconforming identities, the meanings ascribed to those identities, and the developmental process involved in the formation of gendered and sexual identities. The survey consisted of a demographics page, and three sections.

Demographics -- Questions assessed current age, ethnic background, highest education completed, current yearly earnings, current occupation, and birth sex. For birth sex, respondents were given the options "male," "female," "intersex," and "other" (for documenting any unique birth sex assignment experiences). If intersex,

respondents were asked to report what sex (male or female) to which they were assigned at birth.

Part I: Naming My Identities -- Participants answered an open-ended question, "In your own words, how would you describe yourself in terms of your gender identity?" From a list of 30 identity terms that frequently appear in the literature (e.g., butch, dyke, gender-blender, gender queer, transgender, transsexual) (Hill, 1999), participants were asked to choose "What gender identities would you select to describe yourself?" Respondents were allowed to check as many applied to them. Respondents were also offered "prefer no label" or "other," whereby they could provide their own identity term. If "transsexual" was selected, participants were asked whether they have had or planned to have any surgical body modifications and, if so, what kinds of procedures (e.g., top surgery, bottom surgery, hormones only).

Part II: Expressing My Identity -- Participants responded to six open-ended questions asking them to describe in their own words "How do you *express* your gender identity" in daily behavior, dress style and appearance, personality characteristics, sexual behavior, sexual orientation (erotic attractions), and recreational activity or hobby preferences. One additional section, "other," was provided so that respondents could describe any other aspects of their lives not otherwise elicited in which they expressed their gender identities. Each open-ended section had no length restrictions.

Part III: My Important Developmental Milestones -- Based on studies that investigated developmental milestones in marginalized groups (Cass, 1979; Devor, 2004; Tajfel, 1978), the final section presented respondents with a statement matrix where they selected one of eight age range options (from early childhood through adulthood, see APPENDIX C), "At what **age** do you recall feeling or experiencing each of the following?" If respondents had not experienced a milestone, they were

instructed to select the “Not experienced” option. To control for ordinal memory confounding, the matrix was organized by theme: *gender orientation*, *gendered behavior*, *gender identity*, *sexuality*, and *relationships*. Following each thematic matrix block, respondents were provided with an open-ended “Comments” section that allowed for qualitative feedback or commentary qualifying their developmental responses.

Coding into Gender Identity Groups

The coding scheme for grouping respondents by gender identity conceptualization consisted of four major domains: gender identity, gender role and presentation, sexual orientation and partner preference, and transitional status. Within each domain, several sub-domains and specific criteria were used when coding the forced-choice and self-report data. Table 2 presents the operational definition for each major domain and provides examples of relevant sub-domains extracted from participant qualitative responses. Table 3 presents the classification scheme used for the forced-choice identity selections. The following coding procedure was used:

1. For each respondent sub-domain terms from *qualitative* responses were recorded in an Excel worksheet.
2. For each respondent all sub-domain terms were itemized by major domain.
3. If gender identity was not clearly articulated in the qualitative response, or if more than one gender identity was mentioned, the respondent was grouped using the classification scheme outlined in Table 3 and APPENDIX D.
4. A research team consisting of the investigator, the investigator’s academic advisor, and another graduate student in the investigator’s research lab coded the domains for a random selection of 20 respondents.

5. Level of agreement was defined by *total number of codes agreed upon* divided by *total number of codes made* (Kolbe & Burnett, 1991). When inter-rater reliability consistently reached $\geq$ 70% level of agreement (Cohen's Kappa of 0.7) across three random coding samplings, the rest of the sample was then coded using Table 3, and APPENDIX D. Any remaining discrepancies were resolved by discussion as needed.

Developmental period categorizations were age-grouped according to Berk (2005) into childhood, early through late adolescence, emerging adulthood, and adulthood.

Table 2. Coding domains for self-report qualitative data

Major Identity Domain	Domain Description and Sub-domains
Gender Identity	The qualitative description of self in sex- or gender-qualified terms, including the following sub-domains: “female,” “woman,” “male,” “man,” “fluid,” “both,” or “neither;” descriptions may vary (Bem, 1993; Frable, 1997; Fagot & Leinbach 1985; Money 1994).
Gender Role & Presentation	The description of daily behavior, dress style, appearance, and personality in terms that reflect traditionally gendered sub-domains of feminine and masculine characterization (Bem, 1974; Doctor & Flemming, 2001; Kaiser, Rudy, & Bayfield, 1985), or new and unique characterizations including, for example, “fluid” and “gender queer”.
Sexual Orientation & Partner Preference	The self-described erotic attractions or partner preferences in terms of gender presentation, including the sub-domains: “asexual,” “gay,” “bisexual,” “straight,” “lesbian,” “pansexual,” “transgender,” “males,” “men,” “females,” “women,” “queer,” “little or no preference,” or some combination of the above (Savin-Williams, 2005).
Transitional Status	The hormonal or surgical body modifications planned or made, including the sub-domains: “pre-op” (i.e. pre-operation), “noho” (i.e. no hormones), “top-surgery,” “bottom surgery,” and “post-op” (Devor, 2004)

Table 3. Classification scheme for forced-choice identity labels

Female/Woman	**Male/Man**	**Neutral**
Butch	Boy (if listed in "other")	Sex Radical
Diesel Dyke	Fem Male	I do not prefer labels
Dyke	Male	
Fem	Sissy Male	
Female		
Girl (if listed in "other")		

Gender Transitional	**Gender Fluid**
Cross-Dresser	Androgynist
Drag (King or Queen)	Boi
Female-to-Male (FTM)	Camp Reformer
Impersonator (Fem or Male)	Chameleon
Transgender/ist	Gender Blender
Transvestite	Gender Fuck
Transsexual	Gender Queer
Tranny Boi(y)	Hermaphrodite
	Intersex
	Queer

Statistical Analysis

Data were analyzed using JMP 6.0 Statistical Discovery software (2005, SAS Institute Inc, Cary, NC). The *range* and *variety* of gender and sexual identity conceptualizations within this population were analyzed for the four domains listed above using the qualitative data provided by respondents. The between-group differential developmental trajectories were modeled using failure analysis (also referred to as survival analysis, Singer & Willett, 1991). ANOVAs were used for numeric between-group comparisons, and chi-square tests were used for nominal data comparisons. An alpha level of .05 was used for all statistical tests.

Unique to many statistical procedures that examine group differences over time, failure analysis accounts for censored data; that is, all data are used in calculations while accounting for cases experienced (uncensored) and not experienced (censored). Thus, patterns of occurrence are described, compared between groups, and used to build regression models to assess the risk (i.e., chance) of occurrence over time. The target event occurs when an individual moves from one state to another (i.e., not occurred to occurred, or vice versa). In this study, each target event was the age at which each respondent experienced developmental milestones and was marked statistically as "age of event failure." Summary output from the failure analysis represents the proportion of respondents who experienced the event for a given point in time.

RESULTS

Sample demographics are summarized in Table 1. The results are presented in three parts: gender, sexuality, and developmental milestones. Gender and sexuality are summarized using descriptive statistics. Developmental group differences are summarized using discrete survival analysis, and individual between group comparisons are made using chi-square analysis for categorical data or with ANOVA for quantitative data. The summary domain characteristics across four gender identity groups are summarized in Table 4.

Part I. Gender

Gender self-conceptualization. Respondents' qualitative responses to the open question "In your own words, how would you describe yourself in terms of your gender identity?" produced 343 terms. Given the sample size of 170, respondents reported on average two identity terms. The most frequently occurring gender identities reported in sample respondents' qualitative responses included: male, man, or boy (34%); "trans"spectrum terms such as transgender, tranny boy, or tranny fag (17%); female, woman, or girl (15%), and gender queer (10%). Additional terms reported included indirect gender identifiers (14%) such as lesbian (n=2) or tomboy (n=2) and other identity descriptors including androgynous (n=9), feminine (n=2), or non-gendered (n=10). Typically, though not always, the indirect and gender non-specific descriptions were coupled with at least one classifiable forced-choice identity label for subsequent gender identity grouping and analysis.

Table 4. Domain criteria across the four thematic gender identity groups

	Identity Grouping and Sub-Domain Distinctions			
Domains of Identity Composition	**Female/Woman**	**Gender Fluid**	**Gender Transitional**	**Male/Man**
Gender Identity	female, woman, girl	anti-binary (e.g., androgynous)	"transmasculine" spectrum	male, man, guy, boy
Gender Presentation	female typed	alternating within binary stereotypes or androgynous	trending masculine	male typed
Gender Behavior	tomboyish	alternating within binary stereotypes or androgynous	trending masculine; occasional androgyny	male typed
Sexual Orientation	predominantly "lesbian" or "bisexual"	unrestricted	unrestricted	unrestricted
Transitional Status	non-op	non-op*	mid-op or active consideration**	active or complete transision***
Totals (N, %)	28 (16%)	27 (16%)	26 (15%)	89 (53%)

Abbreviations: *non-op* = no surgery and no desire to begin hormones; *mid-op* = some but not all desired aspects of physical transition have been taken.

* Occasional mention of hormone use or only top surgery, but restricted to facilitate a more gender ambiguous presentation.

** Frequent indication of current or future intention to begin hormones and/or transition to male/man status.

*** Current indication of complete or current transition from assigned birth sex; bottom surgery not required for complete transition (Leli & Drescher, 2004).

After coding for gender identity group as described in the Methods section, 82% of female/woman group respondents had gender conceptualizations including the terms “female,” ”woman,” or “girl;” 76% of male/man group respondents had “male,” “man,” “guy,” or boy; 54% of gender fluid group respondents had “genderqueer” (or “gender queer” as two consecutive words), but also had “androgynous,” “neutral,” or “fluid” (42%); and 73% of gender-transitional respondents reported, “fluid,” or “neutral” gendered self concepts. Gender Transitional respondents also reported using masculine or male-spectrum identity conceptualizations including “FTM” (54%) or key phrases including “basically male,” “mostly male,” or variations on “transmale” (31%) to signify their rejection of a female birth sex assignment.

Forced-choice identity term responses by gender identity group is summarized in Table 5. Overall, 36% of the total item responses ranged among gender-fluid terms, 35% gender transitional, 14% male-spectrum, and 11% female-spectrum. Between groups, the mean forced choice list selections increased over 3-fold as gender identity conceptualization was less gender typed (female/woman mean=2; male/man=4; fluid=5; transitional=7).

Male/man group respondents (n=89) reported “transsexual” 32% more than “transgender” for identity conceptualizations. In contrast, gender fluid group respondents (n=27) selected “transgender” 64% more than “transsexual,” and transitional group respondents (n=26) reported “transgender” 12% more often than “transsexual.”

Table 5. Proportions (%) of forced choice identity term response rate by gender identity group.

Gender identity term	**Total Sample (%, N=170)**	**Female/ Woman (%, n=28)**	**Gender Fluid (%, n=27)**	**Gender Transitional (%, n=26)**	**Male/ Man (%, n=89)**
Female-spectrum					
Butch	3	2	5	2	2
Dyke	3	11	6	3	1
Fem	1	11	2	2	0
Female	4	38	5	2	0
Gender Fluid					
Androgynist	3	5	8	3	1
Boi	4	2	6	6	4
Chameleon	1	0	2	2	0
Gender Blender	3	0	5	3	2
Gender Fuck	4	0	5	6	4
Gender Queer & Queer	20	21	30	24	15
Hermaphrodite & Intersex	1	0	0	1	1
Gender Transitional					
Cross Dresser, Drag, Impersonator, Transvestite	4	0	7	6	2
Female-to-male (FTM)	12	0	2	12	17
Tranny Boy	7	0	2	9	8
Transgender	6	2	5	7	5
Transsexual	7	0	1	5	12
Male-spectrum					
Male	12	0	2	5	20
Fem Male & Sissy Male	2	0	1	3	2
Neutral					
I prefer no label	3	5	4	2	2
Sex Radical	1	4	2	1	1

Analysis of variance demonstrated significant between group differences in the proportions of selected gendered identity terms. Each group differed in proportion of female-spectrum identity terms selected, $F(3, 4)=252.6$, $p=0.004$; gender transitional-spectrum, $F(3, 4)=40.7$, $p=0.02$; and male-spectrum, $F(3, 4)=134.3$, $p=0.05$. Gender groups did not differ by gender fluid-spectrum identity terms. Figures 1 through 4 display gender identity compositions by gender identity group.

Daily behavior. In response to the open-ended question "In your own words how do you express your gender in your daily behavior?" thematic analysis demonstrated that primarily, the female/woman group respondents reported traditional gender behaviors (38%) acting "like a girl" or reporting increased sensitivity to others' feelings. However, just over one quarter (28%) of female/woman group respondents reported not displaying distinctly gendered daily behaviors. Nineteen percent reported nonconforming gendered behaviors including increased masculine behavior when at lesbian bars, or general tomboyishness. Some women (14%) described a heightened consciousness of stereotypic feminine versus masculine traits, and reported often actively blurring stereotypic gendered boundaries while still maintaining a female or woman self concept.

Gender fluid group respondents primarily reported behaving in a genderless (41%) or gender blended (25%) self-expression that was not particularly restricted by gender norms. Some also reported that their gendered behavior varied by context depending on the day (21%). Only three gender fluid group respondents reported typical male daily behaviors.

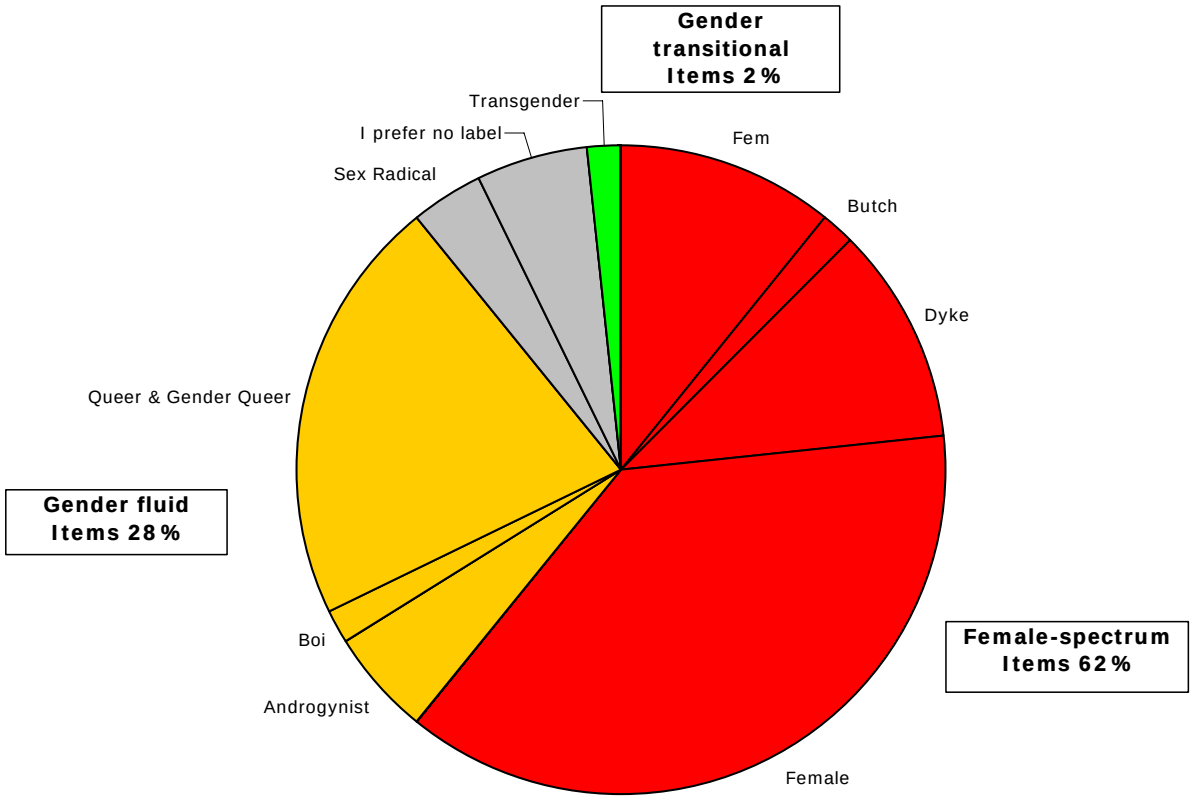

Figure 1. Forced choice identity labels among female/woman group respondents

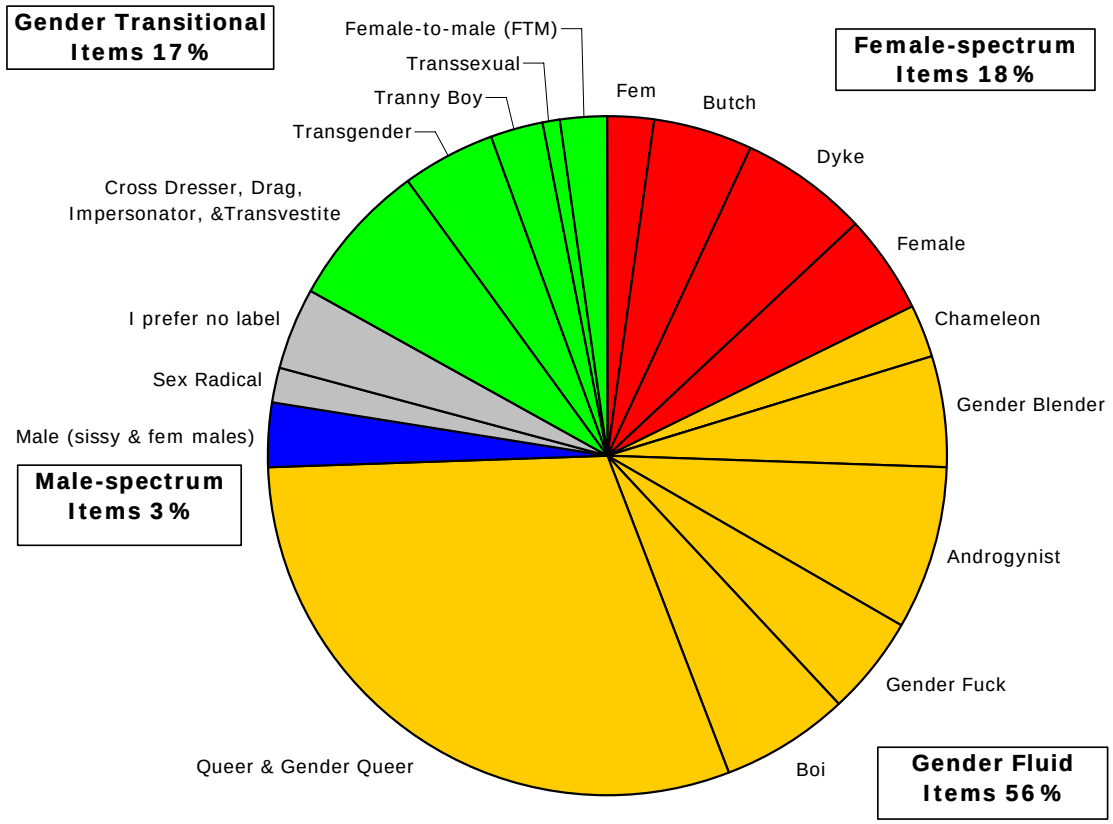

Figure 2. Forced choice identity labels among gender fluid group respondents

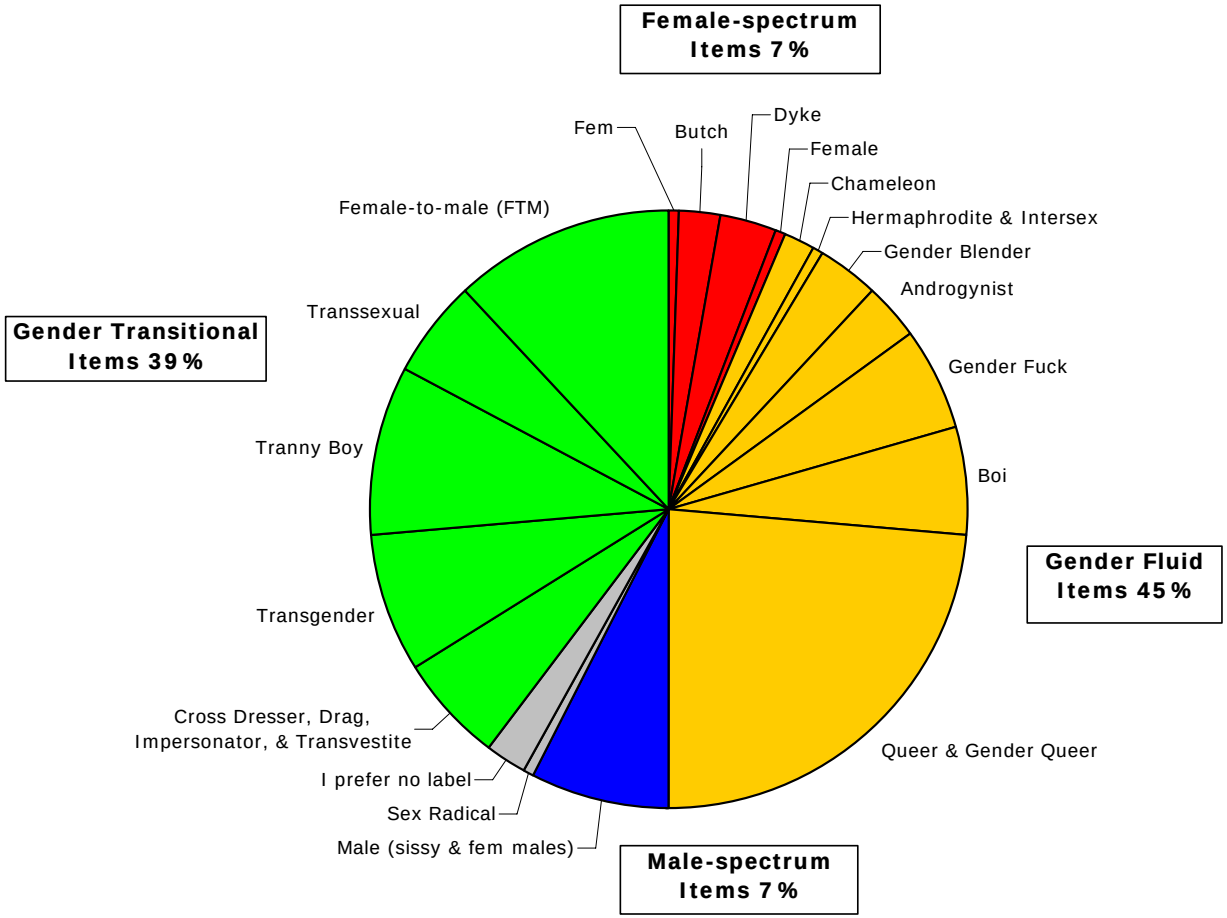

Figure 3. Forced choice identity labels among gender transitional group respondents

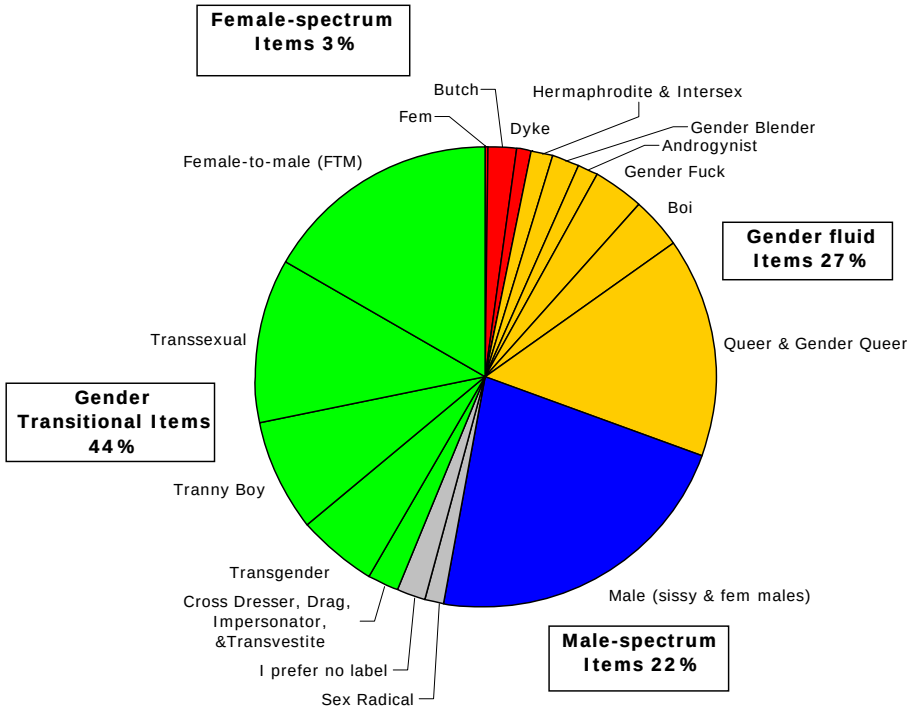

Figure 4. Forced choice identity labels among male/man group respondents

Over half of gender transitional group respondents (65%) reported masculine-typed mannerisms or behaviors including socializing habits, speech patterns, level of physical activity, choice of bathroom or pronouns, and sitting or standing "like a man." Some respondents (19%) reported not really thinking much about gender roles, and said that they just try to act like themselves rather than worry about what is "normal" or how others perceive them.

Seventy-five respondents (84%) provided feedback regarding gender behavior. Of these, 52% (39/75) reported "man-like" or "masculine" mannerisms and behaviors, and 41% (n=31/75) reported not doing anything remarkable to express their gender as male, but commented that they "just live" as a man in the world. The latter also reported achieving a secure point in their social roles as men where they did not have to think much about their gendered daily behavior; they just felt like "themselves" as men. Remaining responses regarding quality of gender behavior included "effeminate" (n=1), "fluctuating" between masculine and feminine (n=1), "gender-neutral" (n=1), "not feminine" (n=1), and "slightly camp" (n=1).

Dress style and appearance -- In response to the open question "How do you express your gender in your dress style or appearance?" female/woman group respondents primarily reported typically women's clothing and appearance (50%). Many expressed wanted to feeling "comfortable" in whatever they chose to wear (35%); however, what was considered comfortable varied (4% each of typical feminine to more masculine dress style). Some female/woman group respondents also reported compartmentalizing dress style as "appropriate" by context, such as when at work or socializing or out with friends, or simply lounging in weekend attire (4%).

Reported dress style among gender fluid group respondents was primarily masculine (42%), but also demonstrated wide variation. Respondents reported that their dress style and appearance changed daily, alternating masculine and feminine

presentations (25%); demonstrated strict androgynous presentations (21%); or androgynous presentations that were trending feminine (8%). One respondent reported strict daily feminine dress style and appearance.

Gender transitional-spectrum respondents reported either exclusively masculine (60%) or trending masculine attire (40%). A number of respondents reported recently changing dress style from woman or androgynous presentations to a style that was more convincingly "male."

Male/man group respondents primarily reported a masculine or male-typical dress style (87%). Respondents also noted feeling much more comfortable expressing a "queer" side to their daily dress style and appearance if they passed socially as male. Few respondents reported dressing more "androgynous" or "gay" in order to express a more "femmy" personality (10%), but noted that this did not reflect any ambivalence about maintaining a male gendered identity.

Transitional status – Female/woman group and gender fluid group respondents did not report any desire or intention to pursue hormonal and/or surgical body modification to change gender appearance. However, two gender fluid respondents reported using sports bras for moderate chest compression and one gender fluid respondent reported actively using gender neutral or male pronouns.

Fifty-four percent of gender transitional group respondents provided information regarding physical transitional status. Of these, 43% reported chest binding or surgical chest reconstruction to actively pass as "male" or more "male-like;" 28% reported testosterone use or being "pre-op," that is, an active *consideration* or *intention* to pursue physical transition; two reported completing physical transition to their liking, but still maintaining a "trans" identity; and one reported no interest in hormonal or surgical body modification, but preferred to actively pass as male using masculine dress style.

Just over one quarter of male/man group respondents reported either taking hormones (9%), or living socially as exclusively "male" without hormone use (19%); an additional 28% were currently binding their chest daily or had completed surgical chest reconstruction; 26% explicitly reported an active desire and intent to pursue surgical transition, but had not yet begun any transitional process; and 18% reported completing physical and hormonal transition to "male" to their satisfaction.

Part II. Sexuality

Respondent qualitative responses to the open question, "In your own words how would you describe your sexual orientation?" resulted in a variety of descriptions (Table 6). Overall, respondents used traditional orientations (e.g., lesbian, gay, bisexual, asexual, straight, queer, and pansexual) three times more frequently than non-traditional orientations (e.g., androgynous-amorous, masculine-amorous, trans-amorous, or woman-amorous), which emphasized the object of erotic attraction (the partner).

Chi-square analysis revealed between group differences for using traditional orientation labels (e.g., lesbian, gay, bisexual, asexual, straight, queer, and pansexual) compared to novel orientation identity labels (e.g., androgynous-amorous, masculine-amorous, trans-amorous, or woman-amorous), (X^2=8.5, df=3, p=0.04). Female/woman and gender transitional group respondents reported more traditional sexual orientation labels (84% and 83% respectively) than male/man (73%) or gender fluid group (55%) respondents. However, each group used more traditional than non-traditional labels.

Table 6. Proportions (%) of the sample self-reported sexual identity orientation labels

Sexual Identity Label	Total Sample (%, N=170)	Female/ Woman (%, n=28)	Gender Fluid (%, n=27)	Gender Transitional (%, n=26)	Male/ Man (%, n=89)
bisexual	22	28	17	13	23
pansexual	18	-	22	29	19
woman-amorous	13	8	17	4	16
fag	2	-	-	-	4
gay	7	4	-	4	12
queer	9	4	9	33	4
lesbian	8	40	4	4	-
straight	7	8	-	-	12
man-amorous	4	-	4	4	4
feminine-amorous	2	4	9	-	1
asexual	1	-	-	-	3
Dominant-BDSM or top	1	-	4	-	1
masculine-amorous	1	-	4	4	-
androgynous-amorous	1	-	-	-	1
dyke	1	4	-	-	-
non-heterosexual	1	-	-	4	-
post-lesbian	1	-	4	-	-
trans-amorous	1	-	17	-	-

Table 7 summarizes the partner preferences from the respondents' qualitative responses. Sample and group totals vary from total sample statistics because not every respondent provided information for partner preferences. Chi-square analysis revealed between group differences for reported partner preference (X^2=8.5, df=9, p=0.002). Female/woman and gender fluid group respondents' partner preferences were predominantly for women. In contrast, gender transitional group's partner preferences were predominantly unrestricted, and male/man group partner preferences were nearly evenly distributed across men, women, both men and women, or unrestricted.

Part III. Developmental Milestones

Respondents were asked to provide the age ranges at which 16 gender identity and nine sexuality developmental events occurred. Although these events are typically analyzed by calculating the mean age at which an event occurs and the proportion of participants who experience each event, survival means and standard deviations were used to account for the random variability of "not experienced" events. Table 8 summarizes the age range codings used in the survival analyses. Table 9 illustrates the mean ages and standard deviations for each gender developmental milestone, as well as the proportions of group respondents who experienced each event.

Sequence for developing a nonconforming gender self-conceptualization. On average, respondents recalled first memories of transgressing gender-typed behaviors, such as wearing boys' clothes or using the opposite-sex bathroom, during early childhood (5 to 7 years old). It was not until early adolescence (8 to 11 years old) when respondents recalled first wishing they had been born a boy. Adolescence

proper (12 to 15 years old) was characterized by gender confusion, first disclosure of discomfort being a girl, the realization one would not magically become a boy, lessened concern about acting like a girl, and awareness that others were treating them differently because of their gender expression. During late adolescence (16 to 19 years old), respondents were increasingly conscious of their gender expressions and were telling others they wanted to be a boy; they also passed as a boy, first became aware of a transgender identity, and noticed that others questioned the respondents' gender identity. Emerging adulthood (20 to 26 years old) brought resolutions to gender identification, more positive feelings about gender identity, disclosure to others of any newly emergent identities, consideration of surgical transitions, and contact with other transgender individuals. Between all of the groups, there were no group differences on three gender milestones: age of first meeting another person with a trans identity, age of fully incorporated unique gender presentation, and age of first pride (Table 9).

Sequence for sexuality development – On average, first romantic crush emerged during adolescence. During late adolescence, respondents explored their erotic attractions through romantic relationships, and adulthood brought resolutions to sexual identifications. Group differences emerged for three milestones: first crush on a boy, age for exploring a straight sexual orientation identity, and age when a lesbian identity did not fit (Table 10). There were no group differences on a number of developmental sexual milestones: onset of puberty, first crush (whether on a boy or a girl), timing of first relationship with a boy or girl (Figure 5), and considering or rejecting a "lesbian" identity. Overall, the four gender identity groups varied considerably in whether they experienced the milestones or not.

Table 7. Proportions (%) of sample respondents' self reported partner preferences

Partner Preference	**Sample Total (%, N=143)**	**Female/ Woman (%, n=25)**	**Gender Fluid (%, n=22)**	**Gender Transitional (%, n=22)**	**Male/ Man (%, n=74)**
Women	34	36	49	18	34
Men	17	4	14	18	23
Women & Men	27	52	14	14	27
Open to some	7	4	18	23	-
Open to all	14	4	5	27	16

Table 8. Age range codings used for survival analyses

Developmental period	Childhood		Adolescence			Emerging adulthood	Adulthood		
			early	middle	late				
Age range (years)	<5	5 to 7	8 to 11	12 to 15	16 to 19	20 to 26	27 to 30	31+	Not Experienced
Survival coding	1	2	3	4	5	6	7	8	9

Table 9. Discrete survival analysis and mean age range of gender developmental milestones across gender identity group.

Gender Developmental Milestone	Total Sample Mean Age Range (% experienced)	Female/ Woman (% exp.)	Gender Fluid (% exp.)	Gender Transitional (% exp.)	Male/ Man (% exp.)	X^2 (3)	N
1st feeling different	5 to 7 (99%)	8 to 11 (93%)	5 to 7 (100%)	5 to 7 (100%)	< 5 (100%)	35.06***	167
1st transgressions	5 to 7 (96%)	8 to 11 (82%)	5 to 7 (100%)	5 to 7 (96%)	< 5 (100%)	32.02***	162
1st wish to have been born male	8 to 11 (79%)	8 to 11 (36%)	8 to 11 (59%)	5 to 7 (92%)	5 to 7 (94%)	29.07***	133
1st gender confusion	12 to 15 (82%)	12 to 15 (32%)	8 to 11 (96%)	12 to 15 (84%)	8 to 11 (93%)	26.85***	140
1st disclosure of rejecting birth sex	12 to 15 (83%)	12 to 15 (37%)	12 to 15 (85%)	8 to 11 (96%)	8 to 11 (93%)	20.88***	137
1st differential treatment	12 to 15 (86%)	16 to 19 (64%)	12 to 15 (88%)	8 to 11 (96%)	12 to 15 (89%)	15.59**	142
1st disclosure of wanting to be male	12 to 15 (79%)	12 to 15 (32%)	12 to 15 (56%)	12 to 15 (88%)	8 to 11 (99%)	28.98***	134
1st passing as male	16 to 19 (84%)	20 to 26 (36%)	20 to 26 (85%)	12 to 15 (92%)	12 to 15 (97%)	31.63***	142
1st confrontation	16 to 19 (85%)	20 to 26 (56%)	20 to 26 (89%)	12 to 15 (96%)	16 to 19 (91%)	11.61*	141
1st good feelings about gender	16 to 19 (92%)	12 to 15 (96%)	12 to 15 (85%)	16 to 19 (96%)	20 to 26 (92%)	18.70**	154
1st disclosure of trans identity	20 to 26 (85%)	16 to 19 (14%)	16 to 19 (88%)	16 to 19 (88%)	16 to 19 (100%)	36.57***	136
1st thoughts of transitioning	20 to 26 (80%)	16 to 19 (14%)	20 to 26 (78%)	16 to 19 (88%)	16 to 19 (100%)	38.25***	136
1st meet trans person	20 to 26 (91%)	20 to 26 (79%)	16 to 19 (96%)	16 to 19 (92%)	20 to 26 (93%)	4.13	153
Incorporation of a unique self	20 to 26 (69%)	20 to 26 (68%)	20 to 26 (77%)	20 to 26 (64%)	20 to 26 (68%)	0.61	114
Felt surgery was necessary	20 to 26 (64%)	16 to 19 (7%)	27 to 30 (33%)	20 to 26 (60%)	16 to 19 (92%)	58.24***	107
1st pride in trans self	27 to 30 (69%)	16 to 19 (11%)	20 to 26 (56%)	20 to 26 (83%)	20 to 26 (87%)	4.77	114

*$p \leq 0.01$; **$p \leq 0.001$; ***$p \leq 0.0001$; Abbreviations: TGNC is "transgender or gender nonconforming"

Female / Woman Group -- Although nearly all respondents reported cross-sex behaviors throughout the life course, female/woman group respondents on average recalled the latest such memories (8-11 years old). Survival analyses demonstrated that, in contrast to the other three groups, most female/woman group respondents did not wish to have been born a boy, never rejected their female birth-sex assignment, and never disclosed disliking being a girl. Moreover, in direct contrast to the other three groups, most female/woman group respondents noted that they often neither actively tried to pass as the other sex nor were they mistaken for the other sex by others (Table 9).

In contrast to the other groups, female/woman group respondents also reported having a heterosexual sexual identity earlier and, by age 15, nearly all had considered or maintained a heterosexual sexual identity prior to adopting a non-heterosexual sexual identity such as "lesbian" (Table 10). At the time of data collection, just over half of the female/woman group respondents maintained a lesbian identity, whereas nearly three quarters of the other respondents had already *rejected* a lesbian identity by age 26 in favor of a more neutral sexual identity, such as "queer."

Gender Fluid Group -- The gender fluid group did not differ from the female/woman group in the expressed wish to have been born a boy, $F(1, 55) = 2.47$, $p = 0.12$. However, the gender fluid group respondents also did not differ from the gender transitional or male/ man groups in their first dislike of being female, $F(2,138) = 1.93$, $p = 0.15$. In fact, one-third fewer gender fluid respondents than the transitional or male/man groups wished to have been born male, $F(2, 141) = 10.90$, $p = 0.0001$. When a wish to have been born a boy was expressed by respondents, both female/woman and gender fluid respondents reported wish occurred on average 3.5 years later than the gender transitional and male/man group means (Figure 6).

Table 10. Discrete survival analysis and mean age range for sexual identity developmental milestones across gender identity group

Sexual Development Milestone	Total Sample Mean Age Range (% experienced)	Female/ Woman (% exp.)	Gender Fluid (% exp.)	Gender Transitional (% exp.)	Male/Man (% exp.)	X^2 (3)	N
1st crush: GIRL	8 to 11 (93%)	12 to 15 (96%)	8 to 11 (96%)	8 to 11 (100%)	12 to 15 (89%)	1.96	157
1st crush: BOY	12 to 15 (84%)	5 to 7 (96%)	8 to 11 (93%)	8 to 11 (88%)	12 to 15 (76%)	13.75*	141
1st straight identity	16 to 19 (72%)	8 to 11 (93%)	12 to 15 (78%)	8 to 11 (71%)	16 to 19 (64%)	18.57**	119
1st relationship: BOY	16 to 19 (78%)	12 to 15 (82%)	16 to 19 (85%)	12 to 15 (88%)	16 to 19 (72%)	1.7	131
1st relationship: GIRL	16 to 19 (86%)	16 to 19 (86%)	16 to 19 (81%)	16 to 19 (84%)	16 to 19 (89%)	5.46	146
1st "lesbian" identity	16 to 19 (81%)	16 to 19 (82%)	16 to 19 (89%)	16 to 19 (85%)	16 to 19 (77%)	2.03	136
"Lesbian" did not fit	20 to 26 (74%)	27 to 30 (30%)	16 to 19 (89%)	16 to 19 (88%)	20 to 26 (80%)	25.87***	123
1st sex: GIRL	20 to 26 (77%)	20 to 26 (71%)	20 to 26 (74%)	16 to 19 (80%)	16 to 19 (78%)	6.27	129
1st sex: BOY	20 to 26 (58%)	16 to 19 (68%)	20 to 26 (63%)	16 to 19 (68%)	20 to 26 (51%)	2.76	98

*$p \leq 0.01$; **$p \leq 0.001$; ***$p \leq 0.0001$

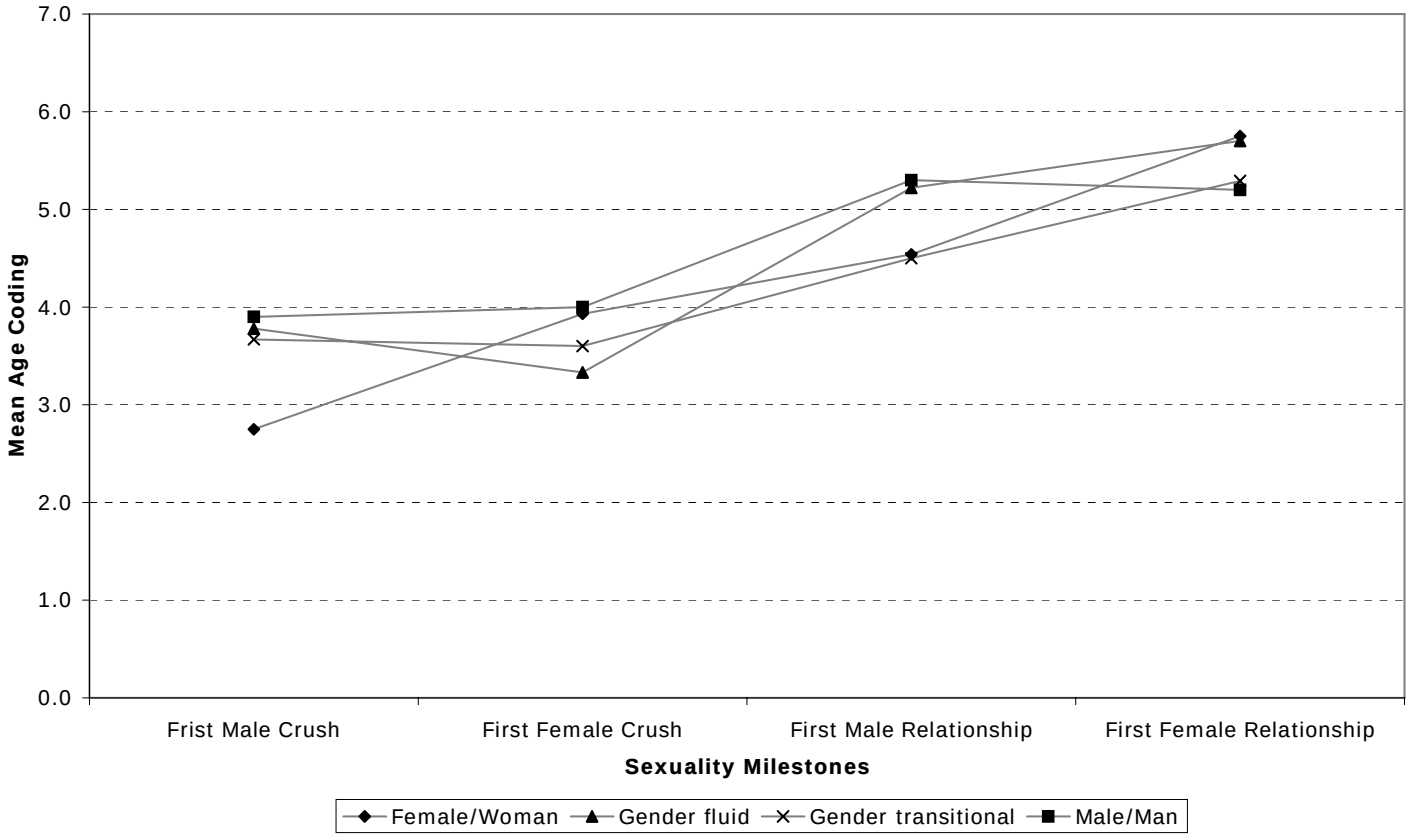

Figure 5. Mean age coding of developmental sexual milestones by gender identity group

Group differences were evident among the three non-female identified groups in first reported passing as the other sex, $F(2, 141) = 6.36$, $p = 0.002$. Gender fluid group respondents did not experience passing as the other sex until late adolescence, namely between 16 and 19 years of age, whereas the gender transitional and male/man groups reported on average first passing as the other sex earlier in middle childhood. After late adolescence, however, a proportionally similar number of gender fluid, gender transitional, and male/man group respondents reported passing as the other sex (Figure 7).

One-way analysis of feeling pride in one's trans self revealed strong group differences, $F(3, 166) = 11.78$, $p = 0.0001$. After excluding female/woman group respondents (who generally did not possess a trans identity), there were no group differences in having a sense of pride in one's trans self, $F(2, 138) = 2.22$, $p = 0.11$. However, gender fluid group respondents typically did not experience pride in a trans self, in contrast to most of the gender transitional and male/man group respondents who achieved a sense of pride in a trans self by adulthood (see Table 9).

Gender Transitional and Male/Man Groups -- Despite the apparent similarities in developmental trajectories and mean ages of milestone attainment between the gender transitional and the male/man groups (Tables 9 and 10), there were three key milestone differences. First, nearly one quarter of male/man group respondents reported not using "lesbian" to name their sexuality, though other group respondents reported that they had explored a lesbian identity in late adolescence. Furthermore, whereas a solid majority of female/woman, gender fluid, and gender transitional group respondents explored a heterosexual sexuality during early adolescence (Table 10), nearly half of male/man group respondents never considered a heterosexual identity. Male/man group respondents that did consider a heterosexual identity reported that it did not emerge until late adolescence.

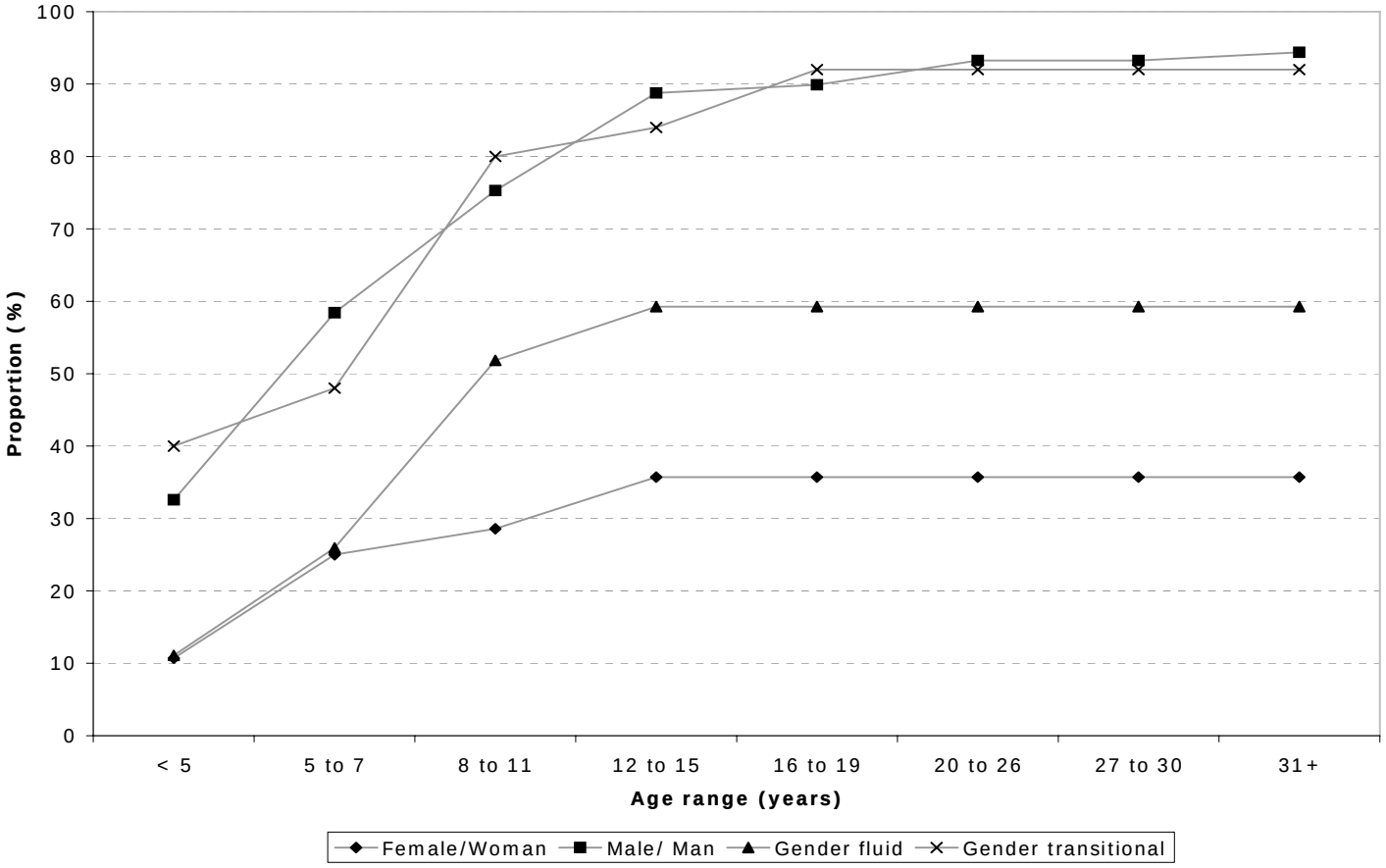

Figure 6. Proportion of respondents by time and gender identity group wishing to have been born a boy

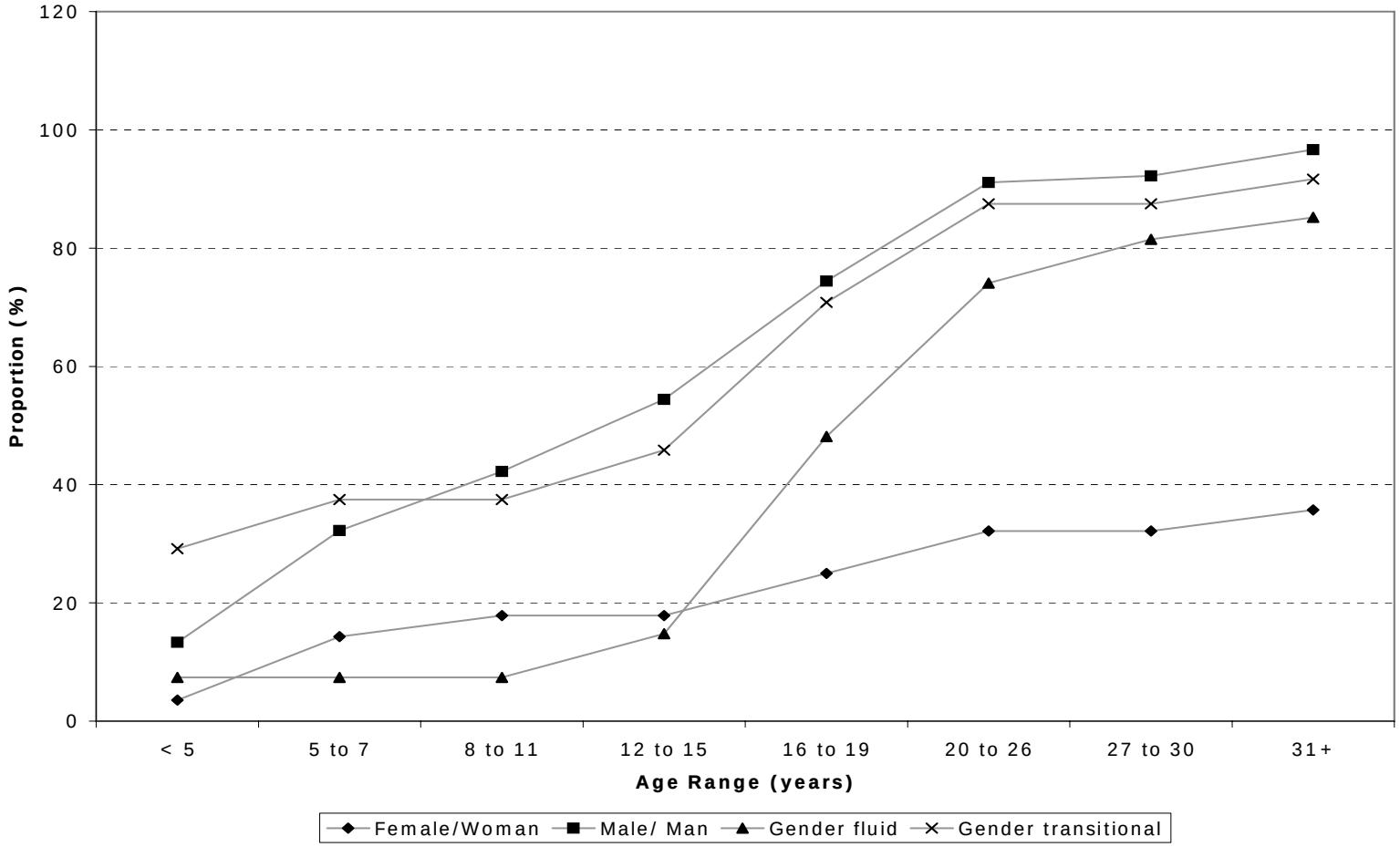

Figure 7. Proportion of respondents by time and gender identity group passing as the other sex

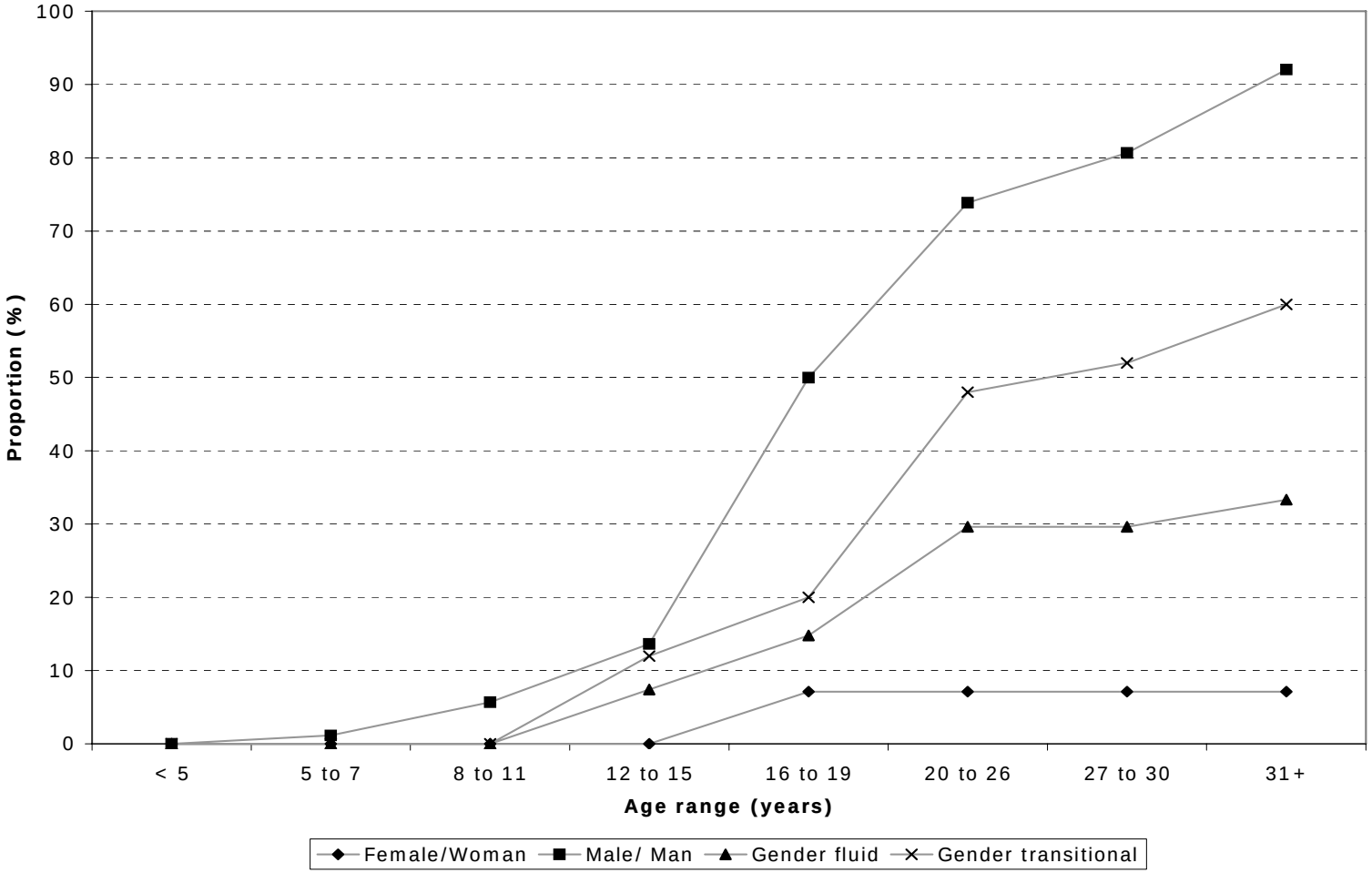

Figure 8. Proportion of respondents by time and gender identity group feeling a need for surgery/hormones to be themselves

Second, on average, gender transitional respondents' first sexual relationships with other men reportedly occurred developmentally concurrent with respondents' first considerations of changing their sex with hormones or surgery. By contrast, male/man group respondents' first sexual relationships with men on average reportedly occurred after already feeling that surgery and/or hormones was *necessary* to be themselves (Tables 9 and 10).

The third major difference was whether surgery and/or hormones would be *required* to feel as one's true self (Figure 8). Although both groups reported similar developmental trajectories for first thoughts of changing one's sex with hormones or surgery, male/man group respondents more than any other group reported feeling the earliest and proportionally greatest *need* for surgery and/or hormones to be themselves, $F(3, 168) = 28.59$, $p = 0.0001$. Thus, surgical and/or hormonal transitional status was a key element of differentiation between gender transitional and male/man groups.

DISCUSSION

Summary of Findings

The present research examined the naming, expression, and developmental milestones of transgender and gender nonconforming identities in a sample of self-identifying gender nonconforming biological females. Using a mixed-method approach, the data indicated that contemporary gender identity conceptualizations and expressions in transgender gender nonconforming natal females represented a spectrum rather than a binary structure. Self-reported gender identity conceptualizations among this sample of natal females demonstrated four qualitatively distinct groups including female/woman, gender fluid, gender transitional, and male/man. Gendered appearance and behavior also demonstrated between group differences. The female/woman group was predominantly female-typed with residual tomboyishness among same-sex attracted respondents. The gender fluid group displayed alternating expressions of masculinity and femininity or androgynous expressions in gendered behavior and appearance. The gender transitional group was masculine-trending in both behavior and appearance. Finally, the male/man group was predominantly male-typed with residual effeminate mannerisms among those reporting sexual or romantic attractions towards other men. These findings validated and extended several gender and sexuality models. First, the current findings validated the transgender model for gender identity conceptualization and extended the current knowledge for transgender and gender nonconforming sexualities. Second, the current findings deepened our understanding of the interactions between gender and sexuality and extended the taxonomy of a gendered sexuality originally proposed by Devor (1993).

In contrast to most research that assigns respondents to sexual identity groups based on biological sex and partner preference, data were analyzed using the respondents' descriptions of themselves as gender and sexually identified individuals. This protected against gender and/or sexual identity group misattribution, especially in intersex cases in which biological sex may not be readily apparent based on external physiology, regardless of birth sex assignment and gender rearing (Fausto-Sterling, 2000).

Identity formation models and process models for "coming-out" as gay, lesbian, and in this case, transgender generally agree on the basic components of these processes, but disagree on the sequence of various stages (Diamond, 1998; Savin-Williams & Cohen, 1996; Savin-Williams, 2005). For example, almost all models begin with an early awareness of "difference" or "not feeling quite right." This is followed by varying durations of identity exploration characterized by gender nonconforming behavior and appearance, and culminating in a consolidated sense of self and identity commitment.

In the present study, gender confusion and gender transgressions first emerged during early childhood. Adolescence was characterized by deeper gender confusion, emerging sexuality, and first disclosure of gender nonconforming identities. Adulthood brought solidification of gender and sexual identifications and increased identity pride. Differences emerged regarding continued gender transgressions and considerations of sex change between the female/woman group and the three non-female identified groups during late adolescence and early adulthood. Partner preference varied by group: female/woman group respondents preferred women partners; gender fluid and gender transitional group respondents reported mostly unrestricted partner preferences; and male/man group respondents preferred women and men, but also reported unrestricted preferences. Thus, this study furthered our

understanding of the interaction of gender and sexual identities. More specifically, these findings validated the differential developmental trajectories model by Savin-Williams (2005) and extended its application to gender identities in transgender samples. Second, these findings validated Devor's unique model of transsexual identity formation (Devor, 2004) by providing developmentally relevant age ranges for the milestones. Third, these data deepened our understanding of Devor's (2004) identity model by providing clarity in two distinct ways: the proportions of individuals experiencing a developmental milestone, and the between group differences for the timing and sequencing of developmental milestones.

A survival analysis of these data accounted for non-experienced events and provided the greatest control for milestone comparison. Thus, strengths of this study included a large sample size and statistical analyses that appropriately accounted for respondents who did not experience a given developmental milestone.

Gender

The current findings extend the body of knowledge about gender in people with transgender and gender nonconforming (trans) identities. As hypothesized, there exists a range and variety of gender identity conceptualizations. Multiple identity labels are used to embody an organized construct of gender identities. Although some biological females with trans identities report gender conceptualizations as more or less male and more or less female, identity conceptualizations such as "neutral" or "neither" exist without reference to biological sex. As hypothesized, there is also a range and variety of gender expressions. Although some biological females with trans identities report gender presentations that ranged from more or less masculine to more or less feminine, identity presentations, such as "neutral" or "neither" exist for behavior, dress, and appearance without reference to gender. Thus, there exist both

within and between group differences in gender conceptualizations and expressions. Therefore, this study supports the transgender theoretical model of trans identity conceptualization (Bornstein, 1994; Boswell, 1991; Denny, 2004; Rothblatt, 1994).

Sexuality

The current findings extend the body of knowledge about sexuality and partner preferences in people with trans identities. As hypothesized, and as summarized in Table 5, there exists a range of sexual orientation identities. There exist within group differences in the use of traditional sexual orientation identity labels, and biological females with trans identities report several novel sexual orientation identities using gender expression (e.g., "feminine-amorous") and gender presentation (e.g., "man-amorous" or "trans-amorous") as descriptors. Although sexual orientation identity labeling may remain a sum product of gender identity and partner preference, the current study demonstrates that gender identity and partner preference are independent constructs. Thus, the current findings support the "new gay" sexuality conceptualizations of Savin-Williams (2005).

Developmental Milestones

The current findings extend the differential developmental trajectories theory proposed by Savin-Williams (2005). Overall the sequencing of developmental events did not appear linear as predicted by previous models of sexual identity development (Cass, 1979; D'Augelli, 1994). Rather the sequencing of developmental events differed across the gender identity groups, and group differences emerged for the existence of specific milestones. For example, some trans biological females explore a heterosexual sexuality during early adolescence, whereas others explore heterosexual identities in late adolescence. Some still do not explore heterosexual relationships at

all. Also as hypothesized, people with trans identities demonstrate differential developmental trajectories for gender identity. Also as hypothesized, Devor's model of transsexual identity development does not accurately summarize the full range of developmental trajectories in a non-clinical sample of trans biological females.

Limitations and Directions for Future Research

Methodology -- Savin-Williams (2005) suggested that marginalized population demographics are highly skewed due to clinical oversampling or demographic undersampling in LGBT circles. In this study, it is not known how representative the sample was of trans populations, as a response rate was unavailable by sampling venue. Moreover this sample is overwhelmingly White. It is, thus, difficult to determine the representativeness of this sample to the trans population.

It was not possible to determine a response rate because it was unknown how many individuals saw the survey and chose not to participate. Respondent-driven sampling maintains four requirements for effective sampling (Heckathorn & Jeffri, 2005). First, respondents must *know* each other as members of the same target population in order to identify whom to pass along word of study recruitment. In this study, the target population was the "trans" and "gender nonconforming" populations. Despite being "hidden communities" (Clements-Noelle et al, 2001), transgender-oriented community centers, such as the Gender Identity Project in New York City, increase visibility and provide a unified and centralized base from which trans community members can get to know one another. Sampling from multiple such venues provide a viable network for respondent-driven sampling. Second, the referral networks must be dense enough to sustain long referral chains in order to maintain sociometric depth and non-zero proportion sampling; in other words, referral chains must sufficiently extend to population members to assure that the recruited study

sample is a representative group of the population. Third, the population must not be so segmented as to limit recruitment to one subgroup's representativeness over another. Finally, the population must be motivated to recruit their peers.

In this study, the methods used for study recruitment were intended to provide diversity in sampling venues and stable population networks needed to achieve adequate representative sampling. Study recruitment was facilitated by both online and hard copy means of study participation. Tabbed flyers allowed for more portable advertisement whereby interested participants could fill out the survey at their convenience. Recruitment was also facilitated by the investigator's referral contact network. This network consisted of embedded community members. Community based participatory research methods support the recruitment benefits afforded to in-group community recruitment efforts (Israel, Eng, Schulz, & Parker, 2005; Paxton, Guentzel, & Trombacco, 2006).

Research has also suggested that special incentives may not be necessary for study recruitment when population members want to share their personal narratives (Heckathorn & Jeffri, 2005). Thus, although respondents were not compensated for their participation, gender nonconforming communities have a long history of feeling misrepresented by the medical and clinical professions (Lev, 2004) that have traditionally provided only dichotomous, forced-choice questionnaires in research and evaluation for a community that does not identify within binaries. Thus, despite general limitations associated with retrospective data collection (e.g., over/under-estimations of milestone ages; memory failures), recent literature suggests that autobiographical memory is quite accurate (Conway, 1990; McAdams, 2001; Pillimer, 2001; Singer & Bluck, 2001). Moreover, using open-ended questions to tap narratives of sexuality and gender, respondents may have felt a greater incentive or even a personal responsibility to share their true stories given the means to use their own

words to represent themselves. Last, study participation was facilitated by the anonymous, confidential, and voluntary nature of the study. Participants were protected from accidental "outing" and the stigma associated with having not already disclosed their identity status or sexual practices.

Gender -- Because this is one of the first studies focused on trans identity conceptualization, expression, and development, there are several implications for future research. This study's distribution of the trans identified biological females into four gender identity groups is one but not the only way in which to reveal intra-sample variations. Although all respondents consider themselves to be trans, within group gender identity conceptualizations and developmental histories are quite disparate. For example, why did the gender groups differ in the number of reported forced choice identity terms? Perhaps the male/man and female/woman group respondents "pass" more frequently in society in their desired gender. Gender expression through appearance, then, requires less language to communicate one's gender identity to another. Moreover, the current study demonstrates that some trans respondents reject labels altogether. This may have an impact on the number of identity terms qualitatively reported or selected from a given list.

Sexuality and developmental milestones -- The current findings also suggest differences in sexuality developmental milestone sequencing. Although data demonstrate within group differences in the experience of various sexual developmental milestones, the interaction between gender identity and sexual orientation identity needs further clarification. For example, it is still not clear from these data whether the heterosexual identities explored during adolescence reflect the true interactions of gender identities between partners' sexual involvement with biological male or man-identified partners while still having a female body, or whether the heterosexual identities reflect involvement with biological females or woman-

identified partners while respondents maintain male/man-spectrum identities. Thurs, the current findings suggest that more research and a new lexicon are needed to further explore gender and sexual identity formation in trans samples.

Sex and gender interactions -- Future research should continue to explore in greater depth the intersections of gender and sexual identities, as well as the qualitative differences between groups in milestone achievement. For example, why did some but not others within the gender groups wish to have been born a boy? Why did male/man group respondents report the latest age range of relinquishing a lesbian identity? Is there a qualitative difference between the gender transitional and male/man identified groups? Or are these two groups representative of different developmental stages along one developmental trajectory?

Devor (1997) suggested that masculine-spectrum identified biological females who discover early solidarity among butch lesbians and dykes remain attached to lesbian identities and communities as long as possible before the more distinguishing changes of hormone treatment render a lesbian or butch community more different than alike. Perhaps the male/man group respondents who reported later mean ages of rejecting a lesbian sexual identity found it difficult to separate from those home base communities. Although the current research cannot adequately address the reasons for between-group milestone disagreement, it is clear that including a spectrum of gender nonconforming individuals in identity developmental research is critical to understanding how individual differences affect the development and experience of transgender identity conceptualization and expression over the life course.

CONCLUSION

Four important findings emerged from the present research. First, there exists a range and variety in the structure and properties of trans identities. Four distinct within group differentiations emerged for gender identity conceptualization with group differences also emerging in gender behavior, gender presentation, and transitional status. Second, there exists a range and variety in the structure and properties of trans sexual identities. Third, the findings also extend our current understanding of the interactions between gender and sexuality. Although gender identity may impact sexual orientation identity label, gender identity and partner preference are independent constructs. Fourth, trans biological females follow individualized differential trajectories for the development of their gender and sexual identities.

The data from this study suggests that several models of gender and sexual identity development are inadequate for summarizing the developmental experience of the trans population. This research provides further evidence that gender and sexuality are multidimentional and interacting constructs, not independent ends of dichotomous categorizations. In conducting responsible research, it is, thus, important to sample appropriately from gender sexual minority populations using multi-method approaches that remain sensitive to within population differences for identity meanings.

This research also provides further support for the transgender model and the differential developmental trajectories model. Gender identity is not a fixed construct established via discrete stages in early childhood. Rather, it is a multidimentional construct that develops over the life course through a dynamic process. Future research should continue to explore the dynamic properties of gender identity development recognizing that persons with TGNC identities offer a fresh perspective for reexamining identity theory, self-discrepancy theory, and human development over

the life course.

Research with sexual minority communities demonstrates that a secure identity has been shown to promote a stable sense of belonging that contributes to psychological well-being (Cass, 1979; Savin-Williams, 2005; Savin-Williams & Cohen, 1996; Steinberg, 2001). Moreover, research investigating the link between emotional well-being and the achievement of secure identities suggests that positive self-esteem may be the key towards developing a sense of pride with one's sexual identity (Savin-Williams, 2005). Today's sexual minorities are resilient and well-adjusted, not the depressed and suicidal persons traditionally portrayed a decade ago (Savin-Williams, 2005). Furthermore, non-heterosexual individuals are coming out at younger ages, and are demonstrating more fluid sexuality conceptualizations. Savin-Williams identified this increasing fluidity as a source for a growing sense of self-confidence and pride. It would not be inappropriate to hypothesize the same among individuals with trans identities.

Sexual minority adolescents report that labels are too restrictive. Sexual identity developmentalists define identity achievement, using labels, by measuring the timing and sequencing of identity emergence. Social psychologists ask whether labels are really the most important predictor for stable and healthy development, suggesting instead that social affirmation and group solidarity leads to a greater, more positive sense of self. In addition, each of the theories of gender development proposes an orderly pattern of development, when these findings suggest that gender as a multidimentional construct, demonstrates wide developmental variation. Perhaps the key to future research on identity development is the convergence of social and developmental psychology.

APPENDIX A

Flyer

TRANSGENDER SURVEY

Did you ever feel like you were not a *typical* boy or girl?
Did you ever feel *different* in your own body?

We are looking for gender diverse individuals at least 18 years of age to participate in a survey study exploring the language used to describe gender and sexuality, as well as people's experiences with gender variance across their lifetime. The anonymous survey can be accessed **online** and will take approximately 20 minutes of your time. To maintain privacy, all data will be stored in password-protected files, which will be available only to the researcher and a faculty supervisor. Your participation is completely voluntary and can be discontinued at any time. For more information, please contact **Tamara Pardo** by email at **TBP3@cornell.edu**.

Survey URL: http://atcdb.cit.cornell.edu/survey//wsb.dll/tbp3/naming-summer2006b.htm

Confidentiality Notice: Email is neither a secure nor private medium.

APPENDIX B

Consent Form

You are invited to participate in a research study. This study will explore the identities used in gender variant communities. Specifically, this study aims to explore how people make meaning of their experiences with gender, and how these experiences affect who they are today. You were selected to participate because gender is an important aspect of your development. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

Background Information: Based on the information available, it is hard to understand who is transgender and what it means to be transgender. The purpose of this study is to gain a better understanding of what it means when we say "transgender."

Procedures: If you agree to be in this study, you will be asked to complete a survey. The survey is either in paper form or a web-based form. The survey should take about twenty minutes to complete. If you are taking the paper survey, there is a self addressed stamped envelope for you to anonymously return it to the principal investigator. The web-based survey is accessed by a web link that you may access at any time from any computer with internet access. The paper survey and the web link survey are identical in content. Each consists of questions about your gender identity and any important developmental milestones related to your formation of that identity.

Compensation: This study is voluntary. There is no compensation for your participation in this study.

Risks and Benefits of Being in the Study: We do not anticipate any risks for you participating in this study.

There are no direct benefits to participating in this study. However, often people feel good when they have an opportunity to share parts of their life history with others. Also, because gender variant individuals are not well-represented in research literature and generally misunderstood in society, you may be pleased that the public will benefit from your participation in this study. Your ideas will help us better understand transgender identities and identity development.

Voluntary Nature of Participation: Your decision whether or not to participate will not affect your current or future relations with your health center, community center, resource group, or other cooperating entities. You may skip any question on the survey that you do not want to answer. If you decide to participate, you may withdraw from the study at any time without penalty. Your consent to participate is implied by your completing and submitting the survey.

Confidentiality: The survey records of this study will be kept private. Paper surveys will be kept in a locked storage file that is only available to the principal investigator and faculty supervisor. Your name will not be recorded at any time. To ensure your confidentiality online, the web-based survey is accessed online from a hyperlink to Cornell University's secure survey site. Also, all web-based data will be maintained via Cornell University's secure server and kept in password-protected files available only to the research team and the faculty supervisor.

Contacts and Questions: If you have any questions, comments, or concerns regarding this study or your participation in this study, you may contact the principal investigator conducting this study, Tamara Pardo, by email at TBP3@cornell.edu. Please ask any questions you have prior to your entering into the study. If you have questions later, you may contact either Tamara Pardo by email or by regular mail at Cornell University, Martha Van Rensselaer Hall, Ithaca, NY 14853. The faculty supervisor on this project is Dr. Ritch Savin-Williams. You may also contact him for further information about the study at rcs15@cornell.edu. If you have any questions about your rights as a research participant, please contact the University Committee on Human Subjects (UCHS) at uchs-mailbox@cornell.edu or by phone at 607-255-5138, or access their website at: http://www.osp.cornell.edu/Compliance/UCHS/homepageUCHS.htm.

You will be given a copy of this form to keep for your records.

This consent form will be kept by the researcher for at least three years beyond the end of the study. This study was approved by the UCHS on May 23, 2006.

SURVEY URL:
http://atcdb.cit.cornell.edu/survey//wsb.dll/tbp3/naming-summer2006b.htm

If you have any trouble with the URL, please copy and paste into a new browser window. If you are still having difficulty connecting to the link, please contact Tamara at TBP3@cornell.edu right away.

Thank you!

APPENDIX C

Survey

Demographics

1. What is your age? _____

2. What is your ethnic background?

☐ Asian/Pacific Islander ☐ White Non-Hispanic

☐ Black/African American ☐ Hispanic, Latino/a, Chicano/a

☐ Native American ☐ Other (please specify):

_____

☐ Biracial/Multi-cultural (please specify): _____

3. What is the highest education you have completed?

☐ Grade School ☐ High School ☐ College / University Degree

☐ Post-graduate Degree ☐ None

5. What is your occupation? _____

6. What are your current yearly earnings?

☐ Less than $20,000

☐ $20,000-$40,000

☐ $40,000-$60,000

☐ More than $60,000

7. What sex were you born?

☐ Male

☐ Female

☐ Intersex

☐ Other (please specify): _____

Part 1. Naming My Identities

Directions: In your own words, how would you describe yourself in terms of your *gender identity*?

_____

_____

_____

_____

_____

_____

2. What *gender identities* would you select to describe yourself?

(Check as many as you feel apply to you. If none fit, then please supply your own.)

☐ Androgynist	☐ Fem	☐ Male
☐ Boi	☐ Female	☐ Male Impersonator
☐ Butch	☐ Female-to-Male (FTM)	☐ Male-to-Female (MTF)
☐ Camp Reformer	☐ Fem Impersonator	☐ Queer
☐ Chameleon	☐ Fem Male	☐ Sex Radical
☐ Cross-Dresser	☐ Gender Blender	☐ Sissy Male
☐ Diesel Dyke	☐ Gender Fuck	☐ Tranny Boi
☐ Drag King	☐ Gender Queer	☐ Transgender/ist
☐ Drag Queen	☐ Hermaphrodite	☐ Transvestite
☐ Dyke	☐ Intersex	
☐ Transsexual		

___ Pre-Op	___ Post-Op	___ Non-Op
___ M2F/ MTF	___ F2M/FTM	

☐ Other(s) not listed:

_____

_____

_____

☐ None

☐ I prefer not to use identity labels

Part 2. Expressing My Identity

Directions: Please describe how you *express* your gender identity in each of the following ways:

Daily Behavior

_____

_____

_____

_____

_____

_____

_____

_____

Dress/Appearance

_____

_____

_____

_____

_____

Personality

Sexual Behavior

Sexual Orientation (Erotic Attractions)

_____

_____

_____

_____

_____

_____

_____

_____

Hobbies/ Recreational Interests

_____

_____

_____

_____

_____

_____

_____

_____

Other (Please Specify:_____)

_____

_____

_____

_____

_____

Part 3. My Important Developmental Milestones

Directions: At what **age** do you recall feeling or experiencing each of the following? If you have not experienced the milestone, then place an "X" in the "Not experienced" blank.

Gender Orientation

Statement	Age	Not experienced
The first time I felt different or unique from other girls.		
When I first felt *confused* about my gender.		
The first time I became aware of the physical difference between boys and girls.		
When I stopped caring about what was "gender appropriate."		
When I was finally able to incorporate a female side of me and a male side of me into a new and unique whole self.		

Comments

_____

_____

_____

_____

_____

_____

_____

Gendered Behavior

Statement	Age	Not experienced
Age of my earliest memory of doing something outside of my expected gender role (e.g. wearing girls'/boys' clothes, having a girl's/boy's haircut, using opposite sex bathroom).		
When I was *most* self-conscious about my gender presentation.		
When I first noticed that people were treating me differently because of my gender expression.		
First time I was discriminated against or treated negatively because of my boyish appearance/behavior.		
The first time I "passed" as the other gender.		

Comments

_____

_____

_____

_____

_____

_____

_____

_____

Gender Identity

Statement	Age	Not experienced
The first time I expressed to someone else that I wanted to be a boy.		
The first time I wished I had been born a boy.		
The first time I told myself/someone else I didn't like being a girl.		
When I realized that I wouldn't magically become a boy.		
When I felt that I would need surgery and/or hormones to "be myself."		
The first time I thought about changing my sex with hormones or surgery.		
The first time I felt good/positive about my gender identity.		
When I chose my own gender identity (other than the one assigned to be at birth).		
When I told my *parent* about my gender identity as "not female."		
The first time I told *someone else* about my gender identity as "not female."		
The first time I heard the term "transgender"		
The first time someone asked me about my gender identity.		

When I first started denying my “non-female” gender identity.		
When I first felt *proud* of my “trans” self.		

Comments

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Sexuality

Statement	Age	Not experienced
When I hit puberty (breast development or menarche, I.e. getting one's period).		
My first crush on a boy.		
My first crush on a girl.		
When I thought I was straight.		
When I realized that I wasn't totally straight.		
When I decided to try out a "lesbian" identity (I.e. lesbian,		

butch, dyke, etc).		
When I decided that the "lesbian" identity did not fit me.		
When I most felt that I needed a clear *self*-defined identity.		

Comments

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Relationships

Statement	Age	Not experienced
My first relationship with a girl.		
My first kiss with a girl.		
The first time I had sexual intercourse with a girl.		
My first relationship with a boy.		
My first kiss with a boy.		
The first time I had sexual intercourse with a boy.		
The first time I met another trans person.		

Comments

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ALL DONE!

Thank you for your participation.

Please return by interoffice mail (if on Cornell's campus) or by regular mail in the self-addressed-stamped envelope provided to:

Tamara Pardo

Human Development

Martha Van Rensselaer Hall, G-77

Cornell University

Ithaca, NY 14853

APPENDIX D

Coding Schedule

Female/Woman

Participant response satisfied at least one of the following criteria:

- Open-ended response for gender identity included any of the words classified in Table 3 for Female/Woman (e.g., I identify as female).
- Any open-ended response for did not indicate self-reference using any of the words from Table 3 for Female/Woman, but clearly indicated self-perception as *female* or as a *woman* using indirect descriptors (e.g., I am a Femme lesbian).
- Qualitative response indicated gender role nonconformity (e.g., self described as a *masculine* woman and/or not a 'typical' woman), but recognized consistent self-perception according to Female/Woman classifications on Table 3 (e.g., I identify as a girl, but I like doing boy-like things such as playing sports, roughhousing, etc).

AND

- Did not use any term indicating identification as "Male/Man" from Table 3, **or**
- Did not use more than one term indicating "gender fluid" identification as listed in Table 3.

Gender Fluid

Participant response satisfied at least one of the following criteria:

- Open-ended response for gender identity indicated respondent did not identify as a traditional sex (male or female) or gender (man or woman).

- Open-ended response for gender identity clearly indicated “not fitting in” with the traditional sex or gender binaries (e.g., Gender Queer; I do not fit into the socially constructed gendered norm of "man" or "woman").
- Open-ended response for gender identity indicated a mixture of the two traditionally accepted genders (e.g., somewhere in-between; I feel like I am a mixture of the two genders, neither of which I think really relates completely with my body image; I have two gender identities inside me at once, female and male).
- Open-ended response for gender identity included at least one term from the “Gender Fluid” category of Table 3 or at least one of the following gender bending words: intergendered, multigendered, gender neutral, other gendered, or non-gendered, **AND** did not use any other words indicating a strong male/man or female/woman identification.
- Open-ended response or forced choice selections included “man” or “woman” identifications, **AND** included more than two novel gender bending identity OR more than two gender fluid forced-choice terms from Table 3 OR in any other way indicated being a very atypical member of their gender identity category.
- Forced-choice selections included only “Gender Fluid” labels from Table 3, and open-ended response was not clear.
- If identity was not clear based on open-ended response to the gender identity question and forced-choice selections, gender identity was assigned using open-ended responses from *gender presentation*.

Gender Transitional

Participant response satisfied at least one of the following criteria:

- Open-ended response for gender identity exclusively included terms from the "Gender Transitional" list in Table 3.
- Open-ended response for gender identity included "Gender Transitional" terms from Table 3 **AND** no more than one "Male/Man" term from Table 3 (e.g., transman, transmale, tranny boy).
- Open-ended response including a trans qualifier as a separate word (e.g., transsexual male, transsexual man, transgender man) was compared with the Male/Man classification scheme in Table 3 to confirm appropriate grouping. If grouping still unclear, group placement was decided by consensus with advisor.
- Forced-choice identity selections included exclusively included terms from the "Gender Transitional" list in Table 3, **AND** met at least one other Gender Transitional criteria above.
- If response met at least one criterion above **AND** forced-choice selections included at least one "Female/Woman" term specified in Table 3, respondent was compared with "Gender Fluid" classification scheme in Table 3 to confirm appropriate grouping. If grouping still unclear, group placement was decided by consensus with advisor.

Male/Man

Participant response satisfied at least one of the following criteria:

- Open-ended response for gender identity included any of the words classified in Table 3 for "Male/Man," or primarily used the words 'guy' or 'boy' to describe gender identity (e.g., I am male; I'm a man).

- Open-ended response for gender identity did not include any terms from the first point above, but clearly indicated self-perception as *male* or as a *man* using indirect descriptors (e.g., I am a fag) **AND** in some other way clearly indicated that they perceived themselves and felt like men (e.g., I am Nathan).
- Open-ended responses indicated gender role nonconformity (e.g., self described as *feminine* in appearance and/or behavior), but indicated clear self-regard as a male, man, guy, young man, or boy (e.g., I am a guy with a girly giggle; I'm on the androgynous side of male).
- Open-ended response for gender identity indicated a "male brain" or "male soul" despite still having a female body. In other words, self-perceptions preceded body in defining respondent gender identity (e.g., A male brain in a female/feminine body; female bodied male spirited). These respondents were compared with "Gender Fluid" and "Gender Transitional" classifications above to confirm appropriate grouping. If grouping still unclear, group placement was decided by consensus with advisor.
- Open-ended response for gender identity included "trans" qualifiers (i.e., transgender, transsexual), **AND** respondent emphasized clear identification as male or as a man (e.g., I am a gay transsexual male; I am an effeminate trans man and am similar to stereotypical gay men).

AND

- Did not use more than one term indicating identification as "Female/Woman" or "Gender Fluid" from Table 3.

Other

- Respondent identity was not provided or unclear beyond consensus in gender identity, gender presentation, or sexual orientation behavior and partner preference qualitative responses.
- The only identity qualifiers included “Sex Radical” **or** “I prefer not to use identity labels.”

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